

REPORT ON FISH COLLECTIONS FROM THE PITCAIRN ISLANDS

BY

JOHN E. RANDALL¹

ABSTRACT

A total of 348 species of marine fishes are recorded from the four Pitcairn Islands in southeastern Oceania: Pitcairn, Henderson, and the atolls Oeno and Ducie. Nearly all of the species listed are from collections made by the author and associates in 1970-71 and deposited in the Bernice P. Bishop Museum, Honolulu. Thirty-three of these were new species when they were collected but have since been described. Twenty-six species are listed only by genus, 15 of which appear to be undescribed and are under study; the remaining 11 are unidentified. Five species of fishes are presently known only from the Pitcairn Islands: *Sargocentron megalops*, *Hemitaenichthys multispinosus*, *Ammodytes* sp., *Enneapterygius ornatus*, and *Alticus* sp. Of the 335 species from the Pitcairn Islands that are shore fishes (the other 13 being regarded as pelagic), 284 are tropical species that are wide-ranging in the central and western Pacific, many of which extend their distribution into the Indian Ocean. Thirty-six of the Pitcairn fishes occur only in the Southern Hemisphere south of latitude 14° S; 21 of these are found only south of 20°S. Some of the latter are broadly distributed at islands across the southern subtropical zone. Twelve species of Pitcairn fishes are antitropical or antiequatorial in distribution based on present knowledge.

INTRODUCTION

The islands of the Pitcairn Group in southeastern Oceania consist of Pitcairn (25°4'S, 130°6'W), Henderson, and the atolls of Oeno and Ducie. Only Pitcairn is inhabited. Lying just south of the Tropic of Capricorn, these four islands are near the southern limit of distribution for tropical Indo-Pacific species of fishes. The nearest island is Temoe Atoll of the Tuamotu Archipelago, about 400 km west of Oeno. To the east there is only Easter Island, more than 1700 km away.

¹Bishop Museum, 1525 Bernice St., Honolulu, Hawaii 96817-2704

For a month beginning 18 December 1970, the author visited the four Pitcairn Islands in the 30-m schooner "Westward" with support of a grant from the National Geographic Society for fish collecting (Randall, 1973, 1978). Also aboard were the late Dr. Harald A. Rehder, malacologist of the Smithsonian Institution, Dr. Yoshihiko Sinoto, then Chairman of Anthropology of Bishop Museum, the late Dennis M. Devaney, then Chairman of Marine Invertebrate Zoology of Bishop Museum, Guy S. Haywood, M.D., the late Captain W. Roger Gray, and a crew of nine, most of whom were also divers.

In addition to the documentation of the fish fauna of these remote islands, there was interest to know the composition of the fish fauna, i.e. how many are wide-ranging tropical Indo-Pacific species; how many are shared with Easter Island to the east (fishes reported by Randall and Cea Egaña, 1984; DiSalvo et al., 1988); how many with Rapa (Randall et al., 1990) and other southern subtropical islands to the west; and whether any are endemic to the Pitcairn Islands.

After spending a week at Mangareva and a day at Temoe Atoll in the southeastern Tuamotus, the "Westward" made its first landfall in the Pitcairn Islands at Oeno (23°55'S, 130°45'W) (Fig. 1), about 4 km in diameter, with a shallow lagoon, no pass, and no safe anchorage. Two days were spent collecting fishes with the ichthyocide rotenone (two stations), hook and line, spearing, and powerhead (explosive-tipped spear)

The vessel arrived in Pitcairn on 20 December and anchored off Bounty Bay. The island (Fig. 2) is small, about 3 km long, of rugged terrain, with no permanent streams and no sandy beaches. A small photographic laboratory was established at "The Edge" above Bounty Bay (Fig. 3), and some fishes that were brought frozen from Temoe and Oeno were photographed.

From 21 December to 10 January, and again from 18 January to 21 January, a total of 31 fish-collecting stations were carried out at Pitcairn; ten of these stations were with rotenone and the rest with spears and quinaldine. In addition, some fishes were taken by hook and line, and a few specimens were provided by Pitcairn fishermen. After the first two days, high winds and heavy seas often made collecting difficult. The rough seas prevented the Pitcairn islanders from deep hand-line fishing, as planned, so all our fish specimens from Pitcairn came from our maximum diving depth of 55 m or less. The surf along the shore also limited inshore collecting. However, several large tidepools, such as the nearly landlocked one at Down St. Paul (Fig. 4) were very productive.

The shallower diving revealed a bottom usually dominated by large boulders (Fig. 5), heavily covered with brown algae (mainly *Sargassum coriifolium* and the branching form of *Lobophora variegata*; in the surge zone, primarily *Turbinaria*). In some areas, such as off Gudgeon Harbor on the south side, there

are broad patches of soft sand deeply etched with ripple marks. At depths greater than about 15 m, the bottom is mainly sand with small rocky areas of low profile. With information from the islanders and by towing divers, we found some well-developed coral reefs. One off Adamstown at a depth of 22-30 m covers an area of about 2 square kilometers, about half consisting of live coral (the colonies less than about 70 cm in diameter). Another off the north shore known by the fishermen as "The Bear", rises about 9 m above the substratum at 44.5 m; it is unusual in being almost entirely covered by live coral. The collecting there provided some very valuable fishes such as *Sargocentron ensifer*, *Genicanthus spinus*, and *Hemitaurichthys multispinosus*. Despite much searching, no steep dropoffs were found off Pitcairn. The sea temperature averaged about 25°C.

On 11 January we sailed to Henderson Island (24°21'S, 128°19'W) to take 14 islanders and their 28-foot boat to collect miro wood for their carving and to leave Dr. Sinoto and his son Aki for archaeological field work while we went on to Ducie. Henderson is a limestone island, the flattened top with a maximum height of about 30 m. Cliffs of about 15 m in height drop abruptly into the sea along the western and southern shores. There is a long sandy beach on the north side, and most of our fish collecting activity was off this beach. Spearing and quinaldine collections were made for a half day on 11 January. Two rotenone stations were carried out during a day and a half after return from the visit to Ducie, one in 49 m resulting in the only specimen of a new species of *Sargocentron*. Sharks were more troublesome at Henderson than the other islands, and two gray reef sharks were powerheaded by divers during collecting activities; four others to a length of 1.7 m were caught by hook and line.

R.A. Irving and J. Jameson were on Henderson Island from October to December, 1991 as part of the Sir Peter Scott Commemorative Expedition to the Pitcairn Islands. Their observations and photographic records of fishes at the island were added to the author's collections and reported as a checklist of 183 species (Irving et al., 1995).

Two and one-half days were spent at Ducie (24°40'S, 124°47'W), the easternmost atoll in Oceania, 470 km east of Pitcairn. An account of the history, physiography, and biota of the atoll was published by Rehder and Randall (1975); it includes a preliminary checklist of 110 species of fishes that were collected and another 27 species as sight records. Among the fishes, the southern subtropical species of butterflyfish, *Chaetodon flavirostris* (Fig. 6).

The following is a list of the species of fishes collected and observed at the Pitcairn Islands. SL stands for standard length, FL for fork length, TL for total length, and PCL for precaudal length (of sharks). The number of specimens reported for the species does not necessarily reflect the relative abundance of the

species. In fact, in some cases, just the reverse, as special effort was often made to collect more specimens of rare or unidentified species. Also, fewer specimens were kept of the larger species because of limitation of the supply of formalin, containers, and space on the vessel. During the 7-months cruise on "Westward", fishes and other marine organisms were also collected from the Society Islands, Tuamotu Archipelago, Rapa, Austral Islands, Cook Islands, and the Marquesas.

Illustrations are given for 32 species of fishes from photographs of specimens collected in the Pitcairn Islands. Species chosen for the illustrations are primarily ones that have not been well illustrated previously or ones for which the photographs help in confirming the identification.

Thirty-three species of fishes from the Pitcairn Islands, undescribed at the time of collection, have been named. All but three of these were represented by specimens from other localities when they were described. The Bishop Museum type specimens of these new species are indicated by parenthetical remarks in the listing of specimens below.

Twenty-six species of Pitcairn fishes are listed by generic name only. Fifteen of these appear to be undescribed and are under study by ichthyologists. The remaining 11 are unidentified due to need for more systematic study of the genera in question, poor condition or juvenile status of specimens, two records from sightings, and in one case to the loss of the only specimen while on loan.

The following publications included descriptions of new species of Pitcairn fishes based at least in part on specimens from the Bishop Museum's collections: Allen and Randall (1972), Cressey and Randall (1978), Fricke (1997), Greenfield (1974), Herald and Randall (1974), Lavenberg (1992), McCosker and Randall (1977), H. Randall and Allen (1977), Randall (1972), Randall (1975a), Randall (1975b), Randall (1979), Randall (1980), Randall (1998), Randall and Baldwin (1997), Randall and Caldwell (1973), Randall and Choat (1980), Randall and Edwards (1984), Randall and McCosker (1992), Randall and Pyle (1989), Randall and Randall (1981), Randall and Smith (1988), and Randall (1999).

Paulay (1989) published a report on the corals, mollusks, and echinoderms of the Pitcairn Islands.

LIST OF SPECIES AND SPECIMENS

CARCHARHINIDAE (REQUIEM SHARKS)

Carcharhinus amblyrhynchos (Bleeker, 1856). BPBM 17073, 680 mm PCL,
BPBM 17108, 840 mm PCL, Henderson.

Carcharhinus galapagensis (Snodgrass and Heller, 1905). BPBM 12573, 1460

mm PCL, Pitcairn; also reported from Ducie (Rehder and Randall, 1975).

Carcharhinus melanopterus (Quoy and Gaimard, 1824). Henderson (Irving et al., 1995).

Galeocerdo cuvier (Peron and Lesueur, 1822). Two tiger sharks have been reported from Pitcairn, one of 4 m (*Pitcairn Miscellany*, 1980, vol. 22, no. 1), and one of 2.5 m (*Pitcairn Miscellany*, 1985, vol. 27, no. 9).

Triaenodon obesus (Rüppell, 1835). Five collected at Oeno, 1105-1238 mm PCL (two shown in Fig. 7), but none was retained; observed at the other three islands.

MYLIOBATIDAE (EAGLE RAYS)

Aetobatis narinari (Euphrasen, 1790). Not observed during the expedition on "Westward", but Stephen Christian sent a photograph of a specimen caught off the jetty at Bounty Bay, Pitcairn in May, 1974 that measured 5 feet in disc width and was estimated to weigh more than 100 pounds. Another ray of this species was harpooned by Christian at Pitcairn in 1983 and reported in *Pitcairn Miscellany*, 1983, vol. 25, no. 3.

MORINGUIDAE (WORM EELS)

Moringua sp. Six lots of eels of this genus were collected at the Pitcairn Islands. No attempt at this time has been made to identify the specimens to species. Difference in morphology of males and females, including more vertebrae in males, for the Hawaiian species of *Moringua* (Gosline and Strasburg, 1956), and the conclusions of Castle (1968) in his valuable preliminary revision of the genus indicate the need for a complete revision of this difficult genus.

CHLOPSIDAE (FALSE MORAYS)

Kaupichthys diodontus Schultz, 1943. BPBM 16615, 99 mm TL, Oeno; BPBM 16890, 76 mm TL, Pitcairn; BPBM 17006, 124 mm TL, Pitcairn; BPBM 17031, 106 mm TL, Pitcairn. Identifications by Kenneth A. Tighe.

CONGRIDAE (CONGER EELS)

Ariosoma sp. BPBM 16621, 181 mm TL, Oeno. Under study by David G. Smith who reports the count of predorsal/preanal/total vertebrae as 7/56/151. This may eventually be shown to be within the range of *A. marginatum* (Vaillant and Sauvage).

Conger cinereus cinereus Rüppell, 1828. BPBM 16721, 252 mm TL, Pitcairn; BPBM 17007, 135 mm TL, Pitcairn.

OPHICHTHIDAE (SNAKE EELS)

Apterichtus sp. BPBM 11842, 347 mm TL, Pitcairn; BPBM 16506, 324 mm TL,

- Oeno; BPBM 16896, 2: 293-385 mm TL, Pitcairn. Initially identified as *A. flavicaudus* (Snyder), but now believed to be undescribed (Fig. 15).
- Ichthyapus vulturis* (Weber and de Beaufort, 1916). BPBM 16467, 217 mm TL, Oeno; BPBM 16527, 112 mm TL, Oeno.
- Leiuranus semicinctus* (Lay and Bennett, 1839). BPBM 16725, 215 mm TL, Pitcairn; BPBM 16988, 165 mm TL, Pitcairn.
- Muraenichthys gymnotus* Bleeker, 1857. BPBM 17023, 4: 110-165 mm TL, Pitcairn.
- Muraenichthys laticaudata* (Ogilby, 1897). BPBM 12263, 2: 103-106 mm TL, Ducie; BPBM 16487, 170 mm TL, Oeno; BPBM 16507, 236 mm TL, Oeno; BPBM 16625, 215 mm TL, Oeno; BPBM 16732, 3: 107-135 mm TL, Pitcairn; BPBM 16971, 2: 112-133 mm TL, Pitcairn; BPBM 16980, 147 mm TL, Pitcairn; BPBM 17093, 11: 91-223 mm TL, Henderson. (Fig. 16).
- Myrichthys maculosus* (Cuvier, 1816). BPBM 16456, 500 mm TL, Pitcairn.
- MORAY EELS (MURAENIDAE)
- Anarchias* spp. Seven lots of small morays of this genus from the Pitcairn Islands are under study by David G. Smith and Erling Holm. Six are provisionally identified as *A. seychellensis* Smith; the seventh is an undescribed species similar to *A. cantonensis* (Schultz) but with a low count of about 100 vertebrae.
- Enchelynassa canina* (Quoy and Gaimard, 1824). Henderson (Irving et al., 1995).
- Gymnothorax australicola* Lavenberg, 1992. BPBM 12262, 257 mm TL, Ducie (misidentified as *G. panamensis* by Rehder and Randall, 1975); BPBM 16844, 230 mm TL (paratype), Pitcairn; BPBM 16877, 5: 180-305 mm TL (paratypes), Pitcairn; BPBM 16975, 3: 115-190 mm TL, Pitcairn; BPBM 16991, 2: 145-155 mm TL, BPBM 17014, 290 mm TL (paratype), Pitcairn; BPBM 17036, 3: 130-258 mm TL, Pitcairn.
- Gymnothorax buroensis* (Bleeker, 1857). BPBM 16690, 196 mm TL, Pitcairn.
- Gymnothorax eurostus* (Abbott, 1860). BPBM 12247, 220 mm TL, Ducie; BPBM 13236, 2: 441-470 mm TL; BPBM 16492, 190 mm TL, Oeno; BPBM 16563, 4: 245-415 mm TL, Oeno; BPBM 16653, 2: 348-395 mm TL, Pitcairn; BPBM 16738, 492 mm TL, Pitcairn; BPBM 16889, 2: 235-270 mm TL, Pitcairn; BPBM 16968, 103 mm TL, Pitcairn; BPBM 17084, 2: 104-197 mm TL, Henderson. (Fig. 8).
- Gymnothorax fuscomaculatus* (Schultz, 1953). BPBM 16488, 3: 130-160 mm TL, Oeno; BPBM 16624, 4: 131-197 mm TL, Oeno; BPBM 17048, 4: 105-170 mm TL, Pitcairn.
- Gymnothorax gracilicauda* Jenkins, 1903. BPBM 16462, 426 mm TL, Oeno; BPBM 16558, 125 mm TL, Oeno. (Fig. 9).

- Gymnothorax javanicus* (Bleeker, 1859). BPBM 16626, 1900 mm TL, 24.5 kg (only the head retained), Henderson; one of 1630 mm TL collected at Pitcairn, but not saved; a partly digested *Diodon* sp., 164 mm SL, was in the stomach.
- Gymnothorax kidako* (Temminck and Schlegel, 1846), 1865. BPBM 16906, 286 mm TL, Pitcairn. (Fig. 10). Identification by Eugenia B. Böhlke.
- Gymnothorax melatremus* Schultz, 1953. BPBM 16620, 9: 73-295 mm TL, Oeno; BPBM 16881, 2: 145-158 mm TL, Pitcairn.
- Gymnothorax meleagris* (Shaw, 1795). BPBM 13237, 845 mm TL, Pitcairn; BPBM 16562, 2: 160-600 mm TL, Oeno; observed at Henderson (Irving et al., 1995).
- Gymnothorax nasuta* de Buen, 1961. BPBM 13265, 673 mm TL, Pitcairn. (Fig. 11).
- Gymnothorax pindae* Smith, 1962. BPBM 16694, 264 mm TL, Pitcairn.
- Uropterygius fuscoguttatus* Schultz, 1953. BPBM 16622, 3: 94-130 mm TL, Oeno; BPBM 16982, 144 mm TL, Pitcairn.
- Uropterygius inornatus* Gosline, 1958. BPBM 16614, 141 mm TL, Oeno.
- Uropterygius kamar* McCosker and Randall, 1977. BPBM 16471, 4: 150-325 mm TL (paratypes), Oeno; BPBM 16606, 297 mm TL (paratype), Oeno ; BPBM 17005, 136 mm TL (paratype), Pitcairn; BPBM 17047, 327 mm TL (paratypes), Pitcairn. (Fig. 12).
- Uropterygius macrocephalus* (Bleeker, 1865). BPBM 16722, 2: 322-433 mm TL, Pitcairn; BPBM 17067, 7: 228-345 mm TL, Oeno; BPBM 17083, 137 mm, Henderson. Identified by John E. McCosker.
- Uropterygius supraforatus* (Regan, 1909). BPBM 16458, 2: 259-378 mm TL, Oeno. (Fig. 13).
- Uropterygius xanthopterus* Bleeker, 1859. BPBM 16460, 4: 171-622 mm TL, Oeno; BPBM 16458, 2: 259-378 mm TL, Oeno; BPBM 16460, 4: 171-622 mm TL, Oeno; BPBM 16470, 275 mm TL, Oeno; BPBM 16619, 9: 180-350 mm TL, Oeno; BPBM 16673, 586 mm TL, Pitcairn; BPBM 16859, 764 mm TL, Pitcairn; BPBM 16885, 348 mm TL, Pitcairn. (Fig. 14).

SYNODONTIDAE (LIZARDFISHES)

- Saurida flamma* Waples, 1982. BPBM 13258, 188 mm SL, Pitcairn.
- Saurida gracilis* (Quoy and Gaimard, 1824). BPBM 16481, 78 mm SL, Oeno; BPBM 16792, 3: 145-365 mm SL, Pitcairn; BPBM 17165, 220 mm SL, Ducie; observed at Henderson (Irving et al., 1995).
- Synodus capricornis* Cressey and Randall, 1978. BPBM 16860, 2: 75-103 mm SL (paratypes), Pitcairn.
- Synodus variegatus* (Lacepède, 1803). BPBM 16768, 183 mm SL, Pitcairn;

BPBM 16789, 2: 236-260 mm SL, Pitcairn.

ANTENNARIIDAE (FROGFISHES)

Antennarius coccineus (Lesson, 1831). BPBM 11175, 25 mm SL, Oeno;
BPBM 28795, 30 mm SL, Oeno.

Antennatus tuberosus (Cuvier, 1817). BPBM 7688, 11.5 mm SL, Oeno; BPBM
11176, 3: 30-39 mm SL, Oeno. (Fig. 17).

ISONIDAE (SURF FISHES)

Iso nesiotus Saeed, Ivantsoff and Crowley, 1993. BPBM 16718, 8: 17-23 mm
SL, Pitcairn.

OPHIDIIDAE (CUSK EELS)

Brotula multibarbata Temminck and Schlegel, 1846. BPBM 16515, 196 mm
SL, Oeno Atoll; BPBM 16848, 85 mm TL, Pitcairn.

BYTHITIDAE (VIVIPAROUS BROTULAS)

Brosomphysiops pautzkei Schultz, 1960. BPBM 16548, 2: 26-39 mm SL, Oeno;
BPBM 16987, 50 mm SL, Pitcairn.

Dinematicthys sp. Ten lots of this species on loan to Yoshihiko Machida.

CARAPIDAE (PEARLFISHES)

Onuxodon fowleri (Smith, 1955). BPBM 16436, 81 mm TL, Pitcairn.

BELONIDAE (NEEDLEFISHES)

Ablennes hians (Valenciennes, 1846). Observed by the author off Pitcairn.

Platybelone argalus platyura (Bennett, 1832). BPBM 16819, 460 mm FL,
Pitcairn; BPBM 17828, 410 mm FL, Henderson; observed at Ducie.

Tylosurus crocodilus crocodilus (Peron and Lesueur, 1821). Henderson
(Irving et al., 1995).

HEMIRAMPHIDAE (HALFBEAKS)

Euleptorhamphus viridis (van Hasselt, 1823). BPBM 36422, 440 mm SL,
regurgitated by a booby, Henderson. A group of about eight were
airborn in front of the ship's small boat when underway at Pitcairn
where the depth was only about 15 m.

Hyporhamphus acutus acutus (Günther, 1861). BPBM 16830, 142 mm SL,
Pitcairn; BPBM 17100, 4: 82-143 mm SL, Henderson.

EXOCOETIDAE (FLYINGFISHES)

Cheilopogon sp. BPBM 16831, 58 mm SL, Pitcairn.

Cypselurus pitcairnensis Nichols and Breder, 1935. The holotype (AMNH
12983, 227 mm SL) and four paratypes (AMNH 13293) are in the
American Museum of Natural History, New York.

Exocoetus obtusirostris Günther, 1866. BPBM 36424, 55 mm SL, between
Henderson and Ducie (found on deck of "Westward").

Exocoetus sp. AMNH 6266, 140 mm SL, from the gullet of a blue-faced
booby, Ducie. Reported as *Halocypselus evolans* (Linnaeus) by Nichols

(1923). Specimen borrowed from the American Museum of Natural History by the author and reported as a species of *Exocoetus*, probably *E. volitans* (Linnaeus) in Rehder and Randall (1975). The specimen was noted as in very poor condition.

HOLOCENTRIDAE (SOLDIERFISHES AND SQUIRRELFISHES)

- Myripristis amaena* (Castelnau, 1873). BPBM 12308, 2: 153-201 mm SL, Pitcairn; BPBM 16581, 188 mm SL, Oeno; BPBP 37090, 203 mm SL, Ducie.
- Myripristis berndti* Jordan and Evermann, 1903. BPBM 16580, 2: 56-223 mm SL, Oeno; BPBM 16655, 4: 93-163 mm SL, Pitcairn; BPBM 17140, 231 mm SL, Ducie.
- Myripristis randalli* Greenfield, 1974. BPBM 12116, 136 mm SL (paratype), Pitcairn.
- Myripristis tiki* Greenfield, 1974. BPBM 12115, 14: 127-184 mm SL (paratypes), Pitcairn; BPBM 12307, 153 mm SL, Pitcairn; BPBM 17170, 184 mm SL, Ducie.
- Neoniphon sammara* (Forsskål, 1775). BPBM 17172, 178 mm, Ducie.
- Plectrypops lima* (Valenciennes, 1831). BPBM 16559, 4: 58-88 mm SL, Oeno; BPBM 16643, 2: 72-100 mm SL, Pitcairn; BPBM 16856, 2: 65-100 mm SL, Pitcairn.
- Sargocentron diadema* (Lacepède, 1801). BPBM 16512, 12: 47-74 mm SL, Oeno; BPBM 16944, 110 mm SL, Pitcairn.
- Sargocentron ensifer* Jordan and Evermann, 1903. BPBM 16787, 194 mm SL, Pitcairn; BPBM 16791, 5: 161-220 mm SL, Pitcairn.
- Sargocentron hormion* Randall, 1998. BPBM 16664, 143 mm SL (holotype), Pitcairn; BPBM 16635, 2: 66-67.5 mm SL (paratypes), Pitcairn; BPBM 16785, 2: 99-145 mm SL (paratypes), Pitcairn.
- Sargocentron lepros* (Allen and Cross, 1983). BPBM 16530, 2: 44-45 mm SL, Oeno; BPBM 16788, 82 mm SL, Pitcairn.
- Sargocentron megalops* Randall, 1998. BPBM 17111, 79 mm SL (holotype), Henderson. Listed as *Sargocentron* sp. in Irving et al., 1995.
- Sargocentron punctatissimum* (Cuvier, 1829). BPBM 16497, 65 mm SL, Oeno; BPBM 16661, 2: 109-119 mm SL, Pitcairn; BPBM 17053, 5: 93-117 mm SL, Henderson.
- Sargocentron spiniferum* (Forsskål, 1775). BPBM 16618, 346 mm SL (head saved), Oeno; BPBM 17139, 325 mm SL (head saved), Ducie; observed at Henderson (Irving et al., 1995).
- Sargocentron tiere* (Cuvier, 1829). BPBM 6578, 209 mm SL, Oeno; BPBM 16659, 3: 185-210 mm SL, Pitcairn; BPBM 17061, 208 mm SL,

Henderson; BPBM 38418, 2: 50-52 mm SL, Oeno; observed at Ducie.

AULOSTOMIDAE (TRUMPETFISHES)

Aulostomus chinensis (Linnaeus, 1766). BPBM 16752, 470 mm SL, Pitcairn; BPBM 16757, 402 mm SL, Pitcairn; observed at Ducie.

FISTULARIIDAE (CORNETFISHES)

Fistularia commersonii Rüppell, 1838. BPBM 16679, 798 mm SL, Pitcairn; BPBM 16767, 675 mm SL, Pitcairn; BPBM 17118, 752 mm SL, Ducie (misidentified as *F. petimba* by Rehder and Randall, 1975); observed at Henderson and Oeno.

SYNGNATHIDAE (PIPEFISHES AND SEAHORSES)

Cosmocampus howensis (Whitley, 1948). BPBM 10856, 2: 80-82 mm SL (paratypes of *Syngnathus caldwelli* Herald and Randall, 1972), Pitcairn.

SCORPAENIDAE (SCORPIONFISHES)

Iracundus signifer Jordan and Evermann, 1903. BPBM 11174, 56 mm SL, Oeno; BPBM 11177, 5: 35-39 mm SL, Oeno; BPBM 11208, 2: 36-37 mm SL, Pitcairn; BPBM 11217, 35 mm SL, Pitcairn; BPBM 11230, 33 mm SL, SL, Pitcairn; BPBM 16888, 34-37 mm SL, Pitcairn. (Fig. 18).

Parascorpaena mcadamsi (Fowler, 1938). BPBM 11195, 5: 32-43 mm SL, Pitcairn; BPBM 11234, 5: 25.7-48.9 mm SL, Ducie. (Fig. 19)

Pontinus sp. BPBM 16439, 53 mm SL, Pitcairn; BPBM 16448, 37 mm SL, Pitcairn, both from dredging in 92-128 m, 19-20 October, 1967; identified by William N. Eschmeyer.

Pterois antennata (Bloch, 1787). BPBM 13261, 152 mm SL, Pitcairn; BPBM 16627, 114 mm SL, Oeno; BPBM 16636, 100 mm SL, Pitcairn; observed at Henderson (Irving et al., 1995).

Pterois volitans (Linnaeus, 1758). BPBM 16629, 193 mm SL, Oeno; observed at Henderson (Irving et al., 1995).

Scorpaenodes hirsutus (Smith, 1957). BPBM 11178, 2: 13-45 mm SL, Oeno; BPBM 11204, 2: 40-43 mm SL, Pitcairn. (Fig. 20).

Scorpaenopsis fowleri (Pietschmann, 1934). BPBM 11181, 7: 23-30 mm SL, Oeno. This small species will probably be reclassified in a new genus.

Scorpaenopsis sp. BPBM 16770, 2: 175-195 mm SL, Pitcairn. These specimens represent a new species; currently on loan to William N. Eschmeyer.

Sebastapistes galatacma Jenkins, 1903. BPBM 16447, 18 mm SL, Pitcairn; BPBM 16605, 38 mm SL, Oeno; BPBM 16945, 19 mm SL, Pitcairn.

Sebastapistes mauritiana (Cuvier, 1829). BPBM 11198, 3: 41-51 mm SL, Pitcairn; BPBM 11213, 3: 20-34 mm, Pitcairn; BPBM 11236, 3: 20-33 mm SL, Henderson; BPBM 17077, 17 mm SL, Henderson. (Fig. 21).

Sebastapistes tinkhami (Fowler, 1946). BPBM 11179, 4: 39-67 mm SL, Oeno; BPBM 11199, 9: 18-40 mm SL, Pitcairn; BPBM 11206, 3: 31-43 mm SL,

ERRATUM

NO. 461 REPORT ON FISH COLLECTIONS FROM THE PITCAIRN ISLANDS
BY JOHN E. RANDALL

Page 7

Uropterygius xanthopterus Bleeker, 1859

should be recorded as

Uropterygius alboguttatus Smith, 1961

Pitcairn; BPBM 11211, 5: 37-69 mm SL, Pitcairn; BPBM 11216, 6: 30-43 mm SL, Pitcairn; BPBM 11235, 10: 29-49 mm SL, Henderson; BPBM 16491, 2: 35-42 mm SL, Oeno.

PLATYCEPHALIDAE (FLATHEADS)

Eurycephalus otaitensis (Cuvier, 1829): BPBM 16696, 3: 62-173 mm SL, Pitcairn; BPBM 16782, 3: 103-137 mm SL, Pitcairn; BPBM 17034, 72 mm SL, Pitcairn.

CARACANTHIDAE (ORBICULAR VELVETFISHES)

Caracanthus maculatus (Gray, 1831). BPBM 16539, 49 mm SL, Oeno; BPBM 16630, 3: 40-48 mm SL, Oeno; BPBM 16929, 4: 31-44 mm SL, Pitcairn. (Fig. 22).

Caracanthus unipinna (Gray, 1831). BPBM 16505, 16: 13-26 mm SL, Oeno; BPBM 17098, 12: 17-29 mm SL, Henderson.

DACTYLOPTERIDAE (HELMET GURNARDS)

Dactyloptena orientalis (Cuvier, 1829). BPBM 16833, 235 mm SL, Pitcairn.

SERRANIDAE (GROUPERS AND SEABASSES)

Cephalopholis argus Bloch and Schneider, 1801. BPBM 16577, 245 mm SL, Oeno; BPBM 16666, 173 mm SL, Pitcairn; BPBM 17162, 223 mm SL, Ducie; observed at Henderson (Irving et al., 1995).

Cephalopholis spiloparaea (Valenciennes, 1828). BPBM 13260, 5: 108-164 mm SL, Pitcairn; BPBM 16790, 3: 47-145 mm SL, Pitcairn. (Fig 23).

Cephalopholis urodeta (Forster in Bloch and Schneider, 1801). BPBM 16566, 3: 98-114 mm SL, Oeno; BPBM 16654, 192 mm SL, Pitcairn; observed at Henderson (Irving et al., 1995).

Epinephelus fasciatus (Forsskål, 1775). BPBM 16610, 65 mm SL, Oeno; BPBM 17045, 69 mm SL, Pitcairn; BPBM 17126, 219 mm SL, Ducie.

Epinephelus hexagonatus (Forster in Bloch and Schneider, 1801). BPBM 13240, 2: 123-211 mm SL, Pitcairn; BPBM 17055, 108 mm SL, Henderson.

Epinephelus lanceolatus (Bloch, 1790). BPBM 33914, 1450 mm SL, 148 kg (saved head), Henderson; collected by the author with powerhead and spear. (Fig. 24). *Pitcairn Miscellany* reported two large *E. lanceolatus* landed at Pitcairn, one of over 182 cm total length speared by Steve Christian in January 1991 and one in January 1993.

Epinephelus merra Bloch, 1793. Observed at Henderson (Irving et al., 1995).

Epinephelus socialis (Günther, 1873). BPBM 16809, 2: 125-197 mm SL, Pitcairn; BPBM 17099, 73 mm SL, Henderson; BPBM 17150, 242 mm SL, Ducie.

Epinephelus tauvina (Forsskål, 1775). BPBM 12256, 84 mm SL, Ducie; BPBM

16579, 278 mm SL, Oeno; BPBM 16698, 2: 174-265 mm SL, Pitcairn; BPBM 16724, 3: 97-113 mm SL, Pitcairn; BPBM 16807, 3: 117-151 mm SL, Pitcairn; BPBM 17054, 86 mm SL, Henderson.

Epinephelus tuamotuensis Fourmanoir, 1971. BPBM 17110, 398 mm SL (hook and line from 120 m), Henderson.

Liopropoma pallidum (Fowler, 1838). BPBM 16543, 2: 47-63.5 mm SL, Oeno.

Plectranthias fourmanoiri Randall, 1980. BPBM 15068, 36.6 mm SL (paratype), Pitcairn;

Plectranthias nanus Randall, 1980. BPBM 16542, 3: 22-37.2 mm SL (paratypes), Oeno; BPBM 16744, 2: 25-27.5 mm SL (paratypes), Pitcairn; BPBM 16847, 30.8 mm SL (paratype), Pitcairn; BPBM 16891, 2: 31.1-34.8 mm SL (paratypes), Pitcairn; BPBM 17027, 35.6 mm SL (paratype), Pitcairn; BPBM 17033, 31 mm SL, Pitcairn.

Plectranthias winniensis (Tyler, 1966). BPBM 16743, 31 mm SL, Pitcairn; BPBM 16901, 33 mm SL, Pitcairn; also paratypes from Ducie were deposited in the California Academy of Sciences and the U.S. National Museum of Natural History.

Plectropomus laevis (Lacepède, 1801). Observed at Oeno.

Pseudanthias mooreanus (Herre, 1935). BPBM 16466, 72 mm SL, Oeno; BPBM 16478, 2: 68-69 mm SL, Oeno; BPBM 16613, 10: 34-64 mm SL, Oeno; BPBM 16854, 3: 48-52 mm SL, Pitcairn.

Pseudanthias ventralis (Randall, 1979). BPBM 16741, 19 mm SL, Pitcairn; BPBM 16862, 2: 32-35 mm SL, Pitcairn Island; BPBM 16883, 51.5 mm SL (holotype), Pitcairn; BPBM 16892, 6: 23-40 mm SL, Pitcairn; observed at Henderson (Irving et al., 1995); abundant in 37-46 m at Ducie.

Pseudogramma australis Randall and Baldwin, 1997. BPBM 16443, 41 mm SL, Pitcairn; BPBM 16444, 27 mm SL (paratype), Pitcairn; BPBM 16893, 33.1 mm SL (paratype), Pitcairn.

Pseudogramma polyacanthum (Bleeker, 1856). BPBM 12272, 4: 37-56 mm SL, Ducie; BPBM 16494, 14: 29-59 mm SL, Oeno; BPBM 16552, 11: 19.5-60.5 mm SL, Oeno; BPBM 16973, 9: 35-56 mm SL, Pitcairn.

Variola louti (Forsskål, 1775). BPBM 16574, 536 mm SL (saved head), Oeno; BPBM 16745, 118 mm SL, Pitcairn; BPBM 16756, 234 mm, Pitcairn; BPBM 17051, 147 mm SL, Henderson; BPBM 17131, 2: 193-196 mm SL, Ducie.

KUHLIIDAE (FLAGTAILS)

Kuhlia marginata (Cuvier, 1829). BPBM 12250, 2: 160-162 mm, Ducie; BPBM 16737, 8: 108-166 mm SL, Pitcairn; BPBM 17063, 3: 25-158 mm SL, Henderson; BPBM 17125, 2: 208-215 mm SL, Ducie. The identification of this species as *K. marginata* is provisional; a revision of the genus is

needed.

PSEUDOCROMIDAE (DOTTYBACKS)

Pseudoplesiops revellei Schultz, 1953. BPBM 16484, 3: 35-36 mm SL, Oeno.

PRIACANTHIDAE (BIGEYES)

Heteropriacanthus cruentatus (Lacepède, 1801). BPBM 16665, 236 mm SL, Pitcairn; BPBM 17169, 260 mm SL, Ducie.

CIRRHITIDAE (HAWKFISHES)

Amblycirrhitus bimacula (Jenkins, 1903). BPBM 16523, 2: 50-63 mm SL, Oeno; BPBM 16633, 3: 30-57 mm SL, Pitcairn; BPBM 17030, 48 mm SL, Pitcairn.

Amblycirrhitus wilhelmi (Lavenberg and Yáñez, 1972). BPBM 16504, 5: 40-64 mm SL, Oeno; BPBM 16637, 68 mm SL, Pitcairn; BPBM 16638, 13: 41-120 mm SL, Pitcairn; BPBM 16740, 38 mm SL, Pitcairn; BPBM 16609, 98 mm SL, Pitcairn; BPBM 16956, 53 mm SL, Pitcairn; BPBM 17068, 9: 45-111 mm SL, Henderson. Placement of this species in the genus *Amblycirrhitus* is provisional; it may require a new genus.

Cirrhitops hubbardi (Schultz, 1943). BPBM 16642, 78 mm SL, Pitcairn; BPBM 17105, 75 mm SL, Henderson; observed at Oeno.

Cirrhitus pinnulatus (Forster in Bloch and Schneider, 1801). BPBM 16713, 155 mm SL, Pitcairn; observed at Henderson.

Neocirrhites armatus Castelnau, 1873. BPBM 16446, 20 mm SL, Pitcairn; BPBM 16502, 6: 49-64 mm SL, Oeno; BPBM 16644, 4: 53-80 mm SL, Pitcairn.

Paracirrhites arcatus (Cuvier, 1829). BPBM 16551, 16: 34-105 mm SL, Oeno; BPBM 16761, 108 mm SL, Pitcairn; common at Henderson (Irving et al., 1995).

Paracirrhites forsteri (Bloch and Schneider, 1801). BPBM 13242, 142 mm SL, Pitcairn; BPBM 16651, 167 mm SL, Pitcairn; BPBM 16663, 135 mm SL, Pitcairn; BPBM 17153, 142 mm SL, Ducie; common at Henderson (Irving et al., 1995).

Paracirrhites hemistictus (Günther, 1874). BPBM 16465, 215 mm SL, Oeno; BPBM 16634, 62 mm SL, Pitcairn; BPBM 16714, 206 mm SL, Pitcairn; BPBM 17137, 229 mm SL, Ducie; common at Henderson (Irving et al., 1995).

Paracirrhites nisus Randall, 1963. BPBM 16521, 93 mm SL, Oeno.

APOGONIDAE (CARDINALFISHES)

Apogon angustatus (Smith and Radcliffe, 1911). BPBM 16469, 57 mm SL, Oeno; BPBM 16522, 8: 48-87 mm SL, Oeno; BPBM 16919, 2: 70-74 mm SL, Pitcairn; BPBM 17037, 88 mm SL, Pitcairn.

- Apogon caudicinctus* Randall and Smith, 1988. BPBM 16799, 2: 53.9-64.3 mm SL (paratypes), Pitcairn.
- Apogon kallopterus* Bleeker, 1856. BPBM 16490, 2: 45-67 mm SL, Oeno; BPBM 16652, 102 mm SL, Pitcairn.
- Apogon taeniophorus* Regan, 1908. BPBM 12258, 6: 14-70 mm SL, Ducie; BPBM 16479, 7: 42-62 mm SL, Oeno; BPBM 16726, 6: 69-79.4 mm SL, Pitcairn; BPBM 16806, 6: 70-101 mm SL, Pitcairn.
- Apogon taeniopterus* Bennett, 1836. BPBM 16493, 3: 55-65 mm SL, Oeno; BPBM 16686, 5: 100-126 mm SL, Pitcairn; BPBM 16898, 107 mm SL, Pitcairn; BPBM 17039, 123 mm SL, Pitcairn.
- Apogon* sp. Seven lots of a small transparent red species of the *Apogon coccineus* complex are under study by David W. Greenfield. These specimens have 14 pectoral rays and usually 3 + 12 gill rakers.
- Apogon* sp. BPBM 16895, 36 mm SL, from 55 m at Pitcairn. An undescribed species that has been sent on loan to Thomas H. Fraser. It is characterized by VII-I,9 dorsal rays II,8 anal rays, 14 pectoral rays, 6 + 17 gill rakers, a straight dorsal head profile, smooth preopercular ridge, and all pale coloration except for a small dusky spot at midbase of caudal fin.
- Cercamia cladara* Randall and Smith, 1988. BPBM 16472, 3: 35-36 mm SL, Oeno; BPBM 16954, 2: 35 mm SL, Pitcairn.
- Cheilodipterus macrodon* (Lacepède, 1801). BPBM 16783, 136.5 mm SL, Pitcairn; BPBM 16784, 166.2 mm SL, Pitcairn.
- Cheilodipterus quinquelineatus* Cuvier, 1828. BPBM 17173, 54 mm SL, Ducie.
- Gymnapogon vanderbilti* (Fowler, 1938). BPBM 16855, 24 mm SL, Pitcairn.
- Gymnapogon* sp. BPBM 16978, 23 mm SL, Pitcairn. An undescribed species under study by Jeng-Ping Chen, who provided the identification of the other Pitcairn species of the genus.
- Pseudamiops gracilicauda* (Lachner in Schultz, 1953). BPBM 16485, 19 mm SL, Oeno.

ECHENEIDAE (REMORAS)

- Phtheirichthys lineatus* (Menziés, 1791). BPBM 16953, 85 mm SL, Pitcairn. Found in the bottom of the dive boat after spearing a specimen of *Diodon hystrix*, 275 mm SL, and several spiny lobsters.
- Remora remora* (Linnaeus, 1758). AMS I.4252, 73 mm SL, obtained by the Australian Museum on exchange from R.E. Vaughan, June, 1899.

CARANGIDAE (JACKS)

- Carangoides ferdau* (Forsskål, 1775). BPBM 16677, 353 mm FL, Pitcairn;

observed at Henderson and Ducie.

Carangoides orthogrammus (Jordan and Gilbert, 1881). BPBM 16585, 518 mm FL (saved head), Pitcairn. Observed at Henderson (Irving et al., 1995).

Caranx ignobilis (Forsskål, 1775). A specimen 1190 mm FL, 38 kg, collected at Henderson but not retained; also observed at Oeno and Ducie.

Caranx lugubris Poey, 1860. Nine caught at Oeno to 675 mm FL, retained the smallest, BPBM 16589, 360 mm FL; BPBM 16671, 422 mm FL (head saved), Pitcairn; BPBM 16777, 290 mm FL, Pitcairn; BPBM 17161, 252 mm FL, Ducie.

Caranx melampygus (Cuvier, 1833). BPBM 16573, 560 mm FL (saved head), Oeno; BPBM 17075, 315 mm FL, Henderson; observed at Ducie and Pitcairn (not common at Pitcairn).

Decapterus sp. Observed at Oeno.

Pseudocaranx dentex (Bloch and Schneider, 1801). BPBM 13267, 302 mm FL, Pitcairn; BPBM 17109, 133 mm FL, Henderson; observed at Oeno.

Seriola lalandi Valenciennes, 1833. BPBM 16965, 915 mm SL (saved head and caudal fin), Pitcairn; observed at Henderson (Irving et al., 1995), and illustrated at Ducie with an underwater photograph (Rehder and Randall, 1975: fig. 28). (Fig. 25).

Seriola rivoliana Valenciennes, 1833. BPBM 17114, 500 mm FL, Ducie.

Uraspis sp. BPBM 17295, 337 mm FL, Pitcairn. This specimen was loaned to Frank Williams and later transferred to Frederick H. Berry. It now appears to be lost.

CORYPHAENIDAE (DOLPHINS)

Coryphaena hippurus Linnaeus, 1758. BPBM 36429, 93 mm SL (dropped on land by a fairy tern), Henderson.

LUTJANIDAE (SNAPPERS)

Aphareus furca (Lacepède, 1802). BPBM 16817, 352 mm SL (saved head), Pitcairn; observed at Henderson and Oeno.

Lutjanus bohar (Forsskål, 1775). BPBM 16603, 360 mm SL, Ducie; five caught at Oeno, the largest 720 mm SL, 16.3 kg, none retained; observed at Pitcairn and Henderson.

Lutjanus kasmira (Forsskål, 1775). BPBM 16603, 255 mm SL, Oeno; BPBM 16772, 260 mm SL, Pitcairn.

Lutjanus monostigma (Cuvier, 1828). One of about 350 mm TL speared at Pitcairn, but escaped.

Paracaesio sordidus Abe and Shinohara, 1962. BPBM 16774, 2: 233-240 mm SL, Pitcairn. (Fig. 26).

CAESIONIDAE (FUSILIERS)

Pterocaesio tile (Cuvier, 1830). Observed at Pitcairn; also at Henderson

(Irving et al., 1995).

LETHRINIDAE (EMPERORS)

Gnathodentex aureolineatus (Lacepède, 1802). BPBM 13257, 224 mm SL, Pitcairn; BPBM 17119, 202 mm SL, Ducie; observed at Henderson (Irving et al., 1995).

Lethrinus olivaceus Valenciennes, 1830. One observed at Henderson (identified as *L. elongatus* by Irving et al., 1995).

Monotaxis grandoculis (Forsskål, 1775). BPBM 16463, 225 mm SL, Oeno; BPBM 16519, 80 mm SL, Oeno; two of 385 and 440 mm SL speared at Pitcairn, the largest 2.4 kg, neither retained; observed at Ducie and Henderson.

MUGILIDAE (MULLETS)

Neomyxus leuciscus (Günther, 1871). BPBM 16464, 12: 90-242 mm SL, Oeno; BPBM 16728, 15: 85-140 mm SL, Pitcairn; observed in shoals on the reef platform at Henderson (Irving et al., 1995); also observed at Ducie.

POLYNEMIDAE (THREADFINS)

Polydactylus sexfilis (Valenciennes, 1831). BPBM 16828, 2: 240-268 mm SL, Pitcairn.

MULLIDAE (GOATFISHES)

Mulloidichthys flavolineatus (Lacepède, 1801). BPBM 16657, 214 mm SL, Pitcairn; BPBM 17151, 298 mm SL, Ducie; reported from Oeno by Nichols (1923) as *Mulloides samoensis*; observed at Henderson.

Mulloidichthys vanicolensis (Valenciennes, 1831). BPBM 13266, 172 mm SL, Pitcairn; BPBM 16576, 2: 236-237 mm SL, Oeno; observed at Henderson (Irving et al., 1995).

Parupeneus bifasciatus (Lacepède, 1801). BPBM 16586, 2: 203-236 mm SL, Oeno; BPBM 16747, 129 mm SL, Pitcairn; BPBM 16938, 154 mm SL, Pitcairn; BPBM 17058, 2: 114-117 mm SL, Henderson; BPBM 17148, 214 mm SL, Ducie.

Parupeneus ciliatus (Lacepède, 1802). BPBM 16753, 312 mm SL, Pitcairn.

Parupeneus cyclostomus (Lacepède, 1801). BPBM 13238, 2: 145-290 mm SL, Pitcairn; BPBM 16587, 226 mm SL, Oeno; BPBM 17132, 310 mm SL, Ducie; observed at Henderson (Irving et al., 1995).

Parupeneus multifasciatus (Quoy and Gaimard, 1825). BPBM 13253, 260 mm SL, Pitcairn; BPBM 13263, 150 mm SL, Pitcairn; BPBM 16561, 3: 90-103 mm SL, Oeno; BPBM 16639, 123 mm SL, Pitcairn; BPBM 16716, 230 mm SL, Pitcairn; BPBM 17130, 244 mm SL, Ducie; observed at Henderson (as *P. trifasciatus*) by Irving et al. (1995).

Parupeneus pleurostigma (Bennett, 1831). BPBM 13264, 6: 117-225 mm SL,

Pitcairn; BPBM 16924, 65 mm SL, Pitcairn; observed at Ducie.

PEMPHERIDAE (SWEEPERS)

Pempheris otaitensis (Cuvier, 1831). BPBM 13252, 2: 165-181 mm SL, Pitcairn; BPBM 16804, 2: 90-120 mm SL, Pitcairn; BPBM 17074, 133 mm SL, Henderson.

KYPHOSIDAE (SEA CHUBS)

Kyphosus bigibbus Lacepède, 1802. BPBM 16712, 204 mm SL, Pitcairn; BPBM 16736, 170 mm SL, Pitcairn; BPBM 16835, 2: 222-390 mm SL, Pitcairn. Common at all the islands; reported from Ducie as *K. fuscus* by Rehder and Randall (1975).

EPHIPODIDAE (SPADEFISHES)

Platax sp. One sight record by Irving et al., 1995 at Henderson; indicated as probably *P. orbicularis* (Forsskål, 1775).

CHAETODONTIDAE (BUTTERFLYFISHES)

Chaetodon auriga Forsskål, 1775. BPBM 17127, 169 mm SL, Ducie; observed at the other three islands.

Chaetodon flavirostris Günther, 1874. BPBM 16592, 2: 153-154 mm SL, Oeno; BPBM 17107, 162 mm SL, Henderson; BPBM 17120, 57 mm SL, Ducie.

Chaetodon lunula (Lacepède, 1802). BPBM 16590, 2: 152-160 mm SL, Oeno; BPBM 16676, 148 mm SL, Pitcairn; BPBM 16735, 83 mm SL, Pitcairn; observed at Henderson.

Chaetodon mertensii Cuvier, 1831. BPBM 13243, 4: 43-118 mm SL, Pitcairn; BPBM 16560, 93 mm SL, Oeno; BPBM 17176, 97 mm SL, Ducie; observed at Henderson (Irving et al., 1995).

Chaetodon ornatissimus Cuvier, 1831. BPBM 13248, 79 mm SL, Pitcairn; BPBM 16508, 138 mm SL, Oeno; BPBM 17154, 2: 140-142 mm SL, Ducie; underwater photo taken at Henderson.

Chaetodon pelewensis Kner, 1868. BPBM 13245, 3: 70-85 mm SL, Pitcairn; BPBM 16555, 4: 61-75 mm SL, Oeno; BPBM 16937, 74 mm SL, Pitcairn; noted as the most common butterflyfish at Henderson by Irving et al. (1995); also common at Ducie.

Chaetodon quadrimaculatus Gray, 1831. BPBM 12238, 120 mm SL, Ducie; BPBM 12277, 120 mm SL, Henderson; BPBM 16567, 2: 111-114 mm SL, Oeno; BPBM 16762, 111 mm SL, Pitcairn.

Chaetodon reticulatus Cuvier, 1831. BPBM 12243, 119 mm SL, Ducie; BPBM 16765, 113 mm SL, Pitcairn; observed at Henderson.

Chaetodon smithi Randall, 1975a. BPBM 13216, 128.7 mm SL (paratype), Pitcairn; BPBM 13217, 123.2 mm SL (paratype), Pitcairn; BPBM 13218, 126.1 mm SL (paratype), Pitcairn; BPBM 13220, 129.8 mm SL (holotype),

- Pitcairn; BPBM 13221, 142 mm SL (paratype), Pitcairn.
- Chaetodon ulietensis* Cuvier, 1831. BPBM 17175, 2: 136-145 mm SL, Ducie; the most common butterflyfish at the atoll.
- Chaetodon unimaculatus* Bloch, 1787. BPBM 16758, 164 mm SL, Pitcairn; BPBM 17117, 101 mm SL, Ducie; observed at Henderson (Irving et al., 1995).
- Forcipiger flavissimus* Jordan and McGregor, 1898. BPBM 16649, 2: 118-123 mm SL, Pitcairn; BPBM 17163, 165 mm SL, Ducie.
- Forcipiger longirostris* (Broussonet, 1782). BPBM 16700, 196 mm SL, Pitcairn; BPBM 16787, 2: 159-171 mm SL, Pitcairn. Both species of the genus observed at Henderson (Irving et al., 1995).
- Hemitaurichthys multispinosus* Randall, 1975a. BPBM 13222, 2: 136.2-159 mm SL (paratypes), Pitcairn; BPBM 13225, 144.1 mm SL (holotype), Pitcairn; BPBM 13327, 2: 136-155 mm SL (paratypes), Pitcairn; BPBM 20802, 2: 146-147 mm SL, Pitcairn. (Fig. 27).
- Hemitaurichthys polylepis* (Bleeker, 1857). BPBM 16701, 125 mm SL, Pitcairn.
- Heniochus chrysostomus* Cuvier, 1831. BPBM 16591, 2: 124-129 mm SL, Oeno; BPBM 16814, 138 mm SL, Pitcairn.
- Heniochus monoceros* Cuvier, 1831. BPBM 16601, 184 mm SL, Oeno; observed at Henderson (Irving et al., 1995).
- POMACANTHIDAE (ANGELFISHES)
- Centropyge flavissima* (Cuvier, 1831). BPBM 12240, 83 mm SL, Ducie; BPBM 13241, 5: 43-60 mm SL, Pitcairn; BPBM 16940, 2: 44-71 mm SL, Pitcairn; BPBM 30201, 2: 39-62 mm SL, Oeno; observed at Henderson (Irving et al., 1995).
- Centropyge heraldi* Woods and Schultz, 1953. BPBM 13262, 2: 92-95 mm SL, Pitcairn; BPBM 16518, 3: 40-67 mm SL, Oeno.
- Centropyge hotumatua* Randall and Caldwell, 1973. BPBM 12275, 3: 32-48 mm SL (paratypes), Ducie; BPBM 13312, 5: 24.9-61.8 mm SL (paratypes), Pitcairn; BPBM 13314, 2: 27.8-36.8 mm SL (paratypes), Oeno; BPBM 13315, 3: 24.5-46.2 mm SL (paratypes), Pitcairn; BPBM 13325, 2: 22.6-27.5 mm SL (paratypes; mistakenly listed as BPBM 13326 by Randall and Caldwell, 1973), Pitcairn; observed at Henderson. (Fig. 28).
- Centropyge loricula* (Günther, 1874). BPBM 16520, 16: 28-52 mm SL, Oeno; BPBM 16843, 2: 44-45 mm SL, Pitcairn; BPBM 16878, 53 mm SL, Pitcairn; BPBM 17171, 37 mm SL, Ducie; observed at Henderson.
- Genicanthus spinus* Randall, 1975b. BPBM 16450, 203 mm SL (holotype),

Pitcairn; BPBM 16452, 2: 182.1-199 mm SL (paratypes), Pitcairn; BPBM 16754, 156.2 mm SL (paratype), Pitcairn; one was speared in 55 m off Ducie, but escaped.

Genicanthus watanabei (Yasuda and Tominaga, 1970). BPBM 16449, 2: 109-137 mm SL, Pitcairn; BPBM 16755, 107 mm SL, Pitcairn; observed at Henderson (Irving et al., 1995).

Pomacanthus imperator (Bloch, 1787). BPBM 16803, 147 mm SL, Pitcairn; BPBM 17294, 255 mm SL, Pitcairn; underwater photo taken at Henderson.

POMACENTRIDAE (DAMSELFISHES)

Abudefduf sordidus Forsskål, 1775. BPBM 17022, 3: 90-110 mm SL, Pitcairn; BPBM 27990, 125 mm SL, Ducie.

Chromis acares Randall and Swerdloff, 1973. BPBM 16540, 11: 34-44 mm SL, Oeno.

Chromis agilis Smith, 1960. BPBM 16525, 6: 37-66 mm SL, Oeno; BPBM 16864, 36 mm SL, Pitcairn; BPBM 17043, 2: 36-70 mm SL, Pitcairn; observed at Henderson and Ducie.

Chromis bami Randall and McCosker, 1992. BPBM 16524, 5: 37.6-55 mm SL (paratypes), Oeno; BPBM 16687, 9: 28.3-55.8 mm SL (paratypes), Pitcairn; observed at Henderson (Irving et al., 1995).

Chromis pamae Randall and McCosker, 1992. BPBM 16457, 10: 41-86.9 mm SL (paratypes), Oeno; BPBM 16905, 103.8 mm SL (holotype), Pitcairn; BPBM 16922, 5: 48.6-101.7 mm SL (paratypes), Pitcairn; observed at Henderson (Irving et al., 1995).

Chromis vanderbilti (Fowler, 1941). BPBM 16914, 3: 40-44 mm SL, Pitcairn; BPBM 16960, 3: 22-34 mm SL, Pitcairn; observed at Ducie.

Chromis xanthura (Bleeker, 1854). BPBM 16628, 115 mm SL, Oeno; BPBM 16824, 2: 115-119 mm SL, Pitcairn.

Chrysiptera galba (Allen and Randall, 1974). BPBM 11132, 3: 48.5-57.2 mm SL (paratypes), Ducie; BPBM 11173, 50 mm SL, Oeno; BPBM 11183, 10: 34.8-59.3 mm SL, Oeno; BPBM 11184, 4: 37-56 mm SL, Oeno; BPBM 11188, 11: 18-60 mm SL, Oeno; BPBM 11197, 5: 38.2-44.3 mm SL (paratypes), Pitcairn; BPBM 11210, 6: 27-56 mm SL, Pitcairn; BPBM 11214, 5: 33-40 mm SL, Pitcairn; BPBM 11231, 4: 41-57 mm SL, Ducie; observed at Henderson.

Dascyllus flavicaudus H. Randall and Allen, 1977. BPBM 16568, 6: 52.7-77 mm SL (paratypes), Oeno; BPBM 16926, 66.1 mm SL (paratype; mistakenly numbered as BPBM 19626 in the original description), Pitcairn; BPBM 16646, 5: 48.7-56.4 mm SL (paratypes), Pitcairn; observed at Henderson (Irving et al., 1995).

- Dascyllus reticulatus* (Richardson, 1846). BPBM 19940, 36 mm SL, Pitcairn.
- Dascyllus trimaculatus* (Rüppell, 1829). BPBM 16812, 106 mm SL, Pitcairn.
- Plectroglyphidodon imparipennis* (Vaillant and Sauvage, 1875). BPBM 12252, 8: 33-41 mm, Ducie; BPBM 16867, 3: 18-24 mm SL, Pitcairn; BPBM 16995, 32: 21-27 mm SL, Pitcairn; BPBM 17085, 6: 18-46 mm SL, Henderson.
- Plectroglyphidodon johnstonianus* Fowler and Ball, 1924. BPBM 16513, 4: 50-75 mm SL, Oeno; BPBM 16689, 51 mm SL, Pitcairn; BPBM 16918, 2: 29-35 mm SL, Pitcairn; BPBM 16934, 66 mm SL, Pitcairn; BPBM 17049, 48 mm SL, Henderson.
- Plectroglyphidodon leucozona* (Bleeker, 1859). BPBM 16727, 15: 58-112 mm SL, Pitcairn; BPBM 17001, 4: 48-67 mm SL, Pitcairn; BPBM 17015, 60 mm SL, Pitcairn; BPBM 17052, 86 mm SL, Henderson. (Fig. 29).
- Plectroglyphidodon phoenixensis* (Schultz, 1943). BPBM 17060. 4: 35-50 mm SL, Henderson; observed at Oeno.
- Pomachromis fuscidorsalis* Allen and Randall, 1974. BPBM 14247, 49 mm SL (paratype), Oeno; BPBM 16528, 45 mm SL, Oeno; BPBM 16692, 3: 35-40 mm SL, Pitcairn; BPBM 17166, 46 mm, Ducie; observed at Henderson (Irving et al., 1995).
- Stegastes emeryi* (Allen and Randall, 1974). BPBM 14245, 44.2 mm SL (holotype), Pitcairn; BPBM 14246, 3: 48.2-55.9 mm SL (paratypes), Oeno; AMS I.17346-001, 2: 66.3-67.5 mm, Ducie (paratypes); BPBM 16483, 67 mm SL, Oeno; BPBM 16535, 2: 50-61 mm SL, Oeno; BPBM 16943, 34 mm SL, Pitcairn; BPBM 17050, 2: 56-59 mm SL, Henderson.
- Stegastes fasciolatus* (Ogilby, 1889). BPBM 12248, 2: 60-71 mm SL, Ducie; BPBM 16556, 2: 66-81 mm SL, Oeno; BPBM 16609, 47 mm SL, Oeno; BPBM 16693, 2: 66-78 mm SL, Pitcairn; BPBM 16925, 3: 24-27 mm SL, Pitcairn; BPBM 16936, 2: 22-95 mm SL, Pitcairn; BPBM 16964, 6: 19-59 mm SL, Pitcairn; BPBM 17038, 118 mm SL, Pitcairn; BPBM 17082, 2: 22-23 mm SL, Henderson; BPBM 38414, 79 mm SL, Oeno.

LABRIDAE (WRASSES)

- Anampses caeruleopunctatus* Rüppell, 1828. BPBM 12048, 2: 238-260 mm SL, Pitcairn; BPBM 12049, 216 mm SL, Pitcairn; BPBM 12245, 154 mm SL, Ducie; BPBM 12278, 177 mm SL, Henderson; BPBM 16746, 216 mm SL, Pitcairn; BPBM 16818, 103 mm SL, Henderson.
- Anampses femininus* Randall, 1972. BPBM 11602, 2: 37-88 mm SL (paratypes), Pitcairn; BPBM 16480, 55 mm SL, Oeno; BPBM 16647, 150 mm SL, Pitcairn; BPBM 16951, 36 mm SL, Pitcairn.
- Anampses twistii* Bleeker, 1856. BPBM 16670, 94 mm SL, Pitcairn.

- Bodianus anthioides* (Bennett, 1832). Observed at Henderson (Irving et al., 1995).
- Bodianus axillaris* (Bennett, 1831). BPBM 13250, 49 mm SL, Pitcairn; BPBM 13259, 147 mm SL, Pitcairn; BPBM 16516, 150 mm SL, Oeno; BPBM 16685, 140 mm SL, Pitcairn; observed at Henderson.
- Bodianus bilunulatus* (Lacepède, 1801). BPBM 16588, 265 mm SL, Henderson; BPBM 17133, 4: 220-295 mm SL, Ducie.
- Cheilinus undulatus* Rüppell, 1835. One observed in 30 m at Henderson (Irving et al., 1995).
- Cheilio inermis* (Forsskål, 1775). BPBM 16775, 260 mm SL, Pitcairn.
- Cirrhiabrus scottorum* Randall and Pyle, 1989. BPBM 16474, 59.8 mm SL (paratype), Oeno; BPBM 16739, 85 mm SL, Pitcairn; BPBM 16904, 2: 60.3-62.7 mm SL (paratypes), Pitcairn.
- Coris aygula* Lacepède, 1801. BPBM 16572, 3: 112-257 mm SL, Oeno; BPBM 16750, 475 mm SL, Pitcairn; BPBM 16810, 3: 95-230 mm SL, Pitcairn; BPBM 17159, 312 mm SL, Ducie; observed at Henderson.
- Coris* sp. 11 lots from Pitcairn and Oeno; a new species to be described by the author.
- Gomphosus varius* Lacepède, 1801. BPBM 16501, 34 mm SL, Oeno; BPBM 16723, 140 mm SL, Pitcairn; observed at Ducie and Henderson.
- Halichoeres margaritaceus* (Valenciennes, 1839). BPBM 16719, 103 mm SL, Pitcairn; observed at Oeno.
- Halichoeres marginatus* Rüppell, 1835. BPBM 16496, 55 mm SL, Oeno.
- Halichoeres melasmapomus* Randall, 1980. BPBM 16702, 2: 107.7-118.2 mm SL (paratypes), Pitcairn; BPBM 16899, 68 mm SL (holotype), Pitcairn.
- Halichoeres trimaculatus* (Quoy and Gaimard, 1834). One observed in the Ducie lagoon.
- Hemigymnus fasciatus* (Bloch, 1792). BPBM 16715, 213 mm SL, Pitcairn; observed at Henderson and Ducie.
- Hologymnosus annulatus* (Lacepède, 1801). BPBM 16766, 2: 259-315 mm SL, Pitcairn; BPBM 16826, 295 mm SL, Pitcairn.
- Labroides bicolor* Fowler and Bean, 1928. BPBM 13247, 95 mm SL, Pitcairn; observed at Oeno.
- Labroides dimidiatus* (Valenciennes, 1839). BPBM 16546, 2: 56-83 mm SL, Oeno; BPBM 16683, 77 mm SL, Pitcairn; BPBM 16962, 14 mm SL, Pitcairn; BPBM 17040, 105 mm SL, Pitcairn; BPBM 17103, 76 mm SL, Henderson; BPBM 17174, 44 mm SL, Ducie.
- Labroides rubrolabiatus* Randall, 1958. BPBM 13246, 67 mm SL, Pitcairn; BPBM 16545, 2: 51-66 mm SL, Oeno; BPBM 16687, 4: 42-70 mm SL,

- Pitcairn; BPBM 17168, 2: 59-60 mm SL, Ducie; observed at Henderson in 55 m.
- Macropharyngodon meleagris* (Valenciennes, 1839). BPBM 12242, 76 mm SL, Ducie; BPBM 16611, 64 mm SL, Oeno; BPBM 16939, 2: 45-109 mm SL, Pitcairn; BPBM 17046, 4: 45-59 mm SL, Pitcairn.
- Novaculichthys taeniourus* (Lacepède, 1801). Observed at Oeno.
- Oxycheilinus unifasciatus* (Streets, 1877). BPBM 16778, 233 mm SL, Pitcairn; BPBM 17129, 220 mm SL, Ducie (identified as *Cheilinus rhodochrous* by Rehder and Randall, 1975).
- Oxycheilinus* sp. An undescribed species under study by Mark Westneat, Martin F. Gomon, and the author. One was speared in 49 m at Henderson but escaped.
- Pseudocheilinus octotaenia* Jenkins, 1901. BPBM 16541, 6: 48-69 mm SL, Oeno; BPBM 17041, 90 mm SL, Pitcairn; observed at Ducie and Henderson.
- Pseudocheilinus tetrataenia* Schultz, 1960. BPBM 12273, 3: 23-48 mm SL, Ducie; BPBM 16503, 7: 33-47 mm SL, Oeno; BPBM 16529, 3: 26-55 mm SL, Oeno; BPBM 16884, 4: 33-47 mm SL, Pitcairn; observed at Henderson.
- Pseudocheilinus citrinus* Randall, 1999. BPBM 16863, 59.8 mm SL (holotype), Pitcairn; BPBM 16879, 38.8 mm (paratype), Pitcairn; BPBM 17102, 65.3 mm SL (paratype), Henderson; another paratype from Pitcairn to National Science Museum, Tokyo.
- Pseudocheilinus ocellatus* Randall, 1999. BPBM 16900, 39.5 mm SL (paratype), Pitcairn.
- Pseudojuloides atavai* Randall and Randall, 1981. BPBM 16902, 115.8 mm SL (holotype), Pitcairn; paratypes from Pitcairn and Oeno to other museums; observed at Ducie.
- Pseudolabrus fuentesi* (Regan, 1913). BPBM 15073, 10: 35-135 mm SL, Pitcairn; BPBM 16976, 10: 32-47 mm SL, Pitcairn; BPBM 17019, 10: 37-61 mm SL, Pitcairn; BPBM 17044, 68 mm SL, Pitcairn.
- Stethojulis bandanensis* (Bleeker, 1851). BPBM 12264, 2: 80-103 mm SL, Ducie; BPBM 16500, 60 mm SL, Oeno; BPBM 16699, 65 mm SL, Pitcairn; BPBM 16802, 4: 77-82 mm SL, Pitcairn.
- Thalassoma heiseri* Randall and Edwards, 1984. BPBM 12266, 8: 37.6-104.6 mm SL (paratypes), Ducie; BPBM 16511, 2: 57.2-89.7 mm SL (paratypes), Oeno; BPBM 16517, 7: 31.1-102 mm SL (paratypes), Oeno; BPBM 16682, 70.4 mm SL (holotype), Pitcairn; BPBM 17004, 9: 41.2-88 mm SL (paratypes), Pitcairn; BPBM 17059, 8: 38.2-116.2 mm SL (paratypes), Henderson.

Thalassoma lutescens (Lay and Bennett, 1839). BPBM 12265, 5: 48-86 mm SL, Ducie; BPBM 16510, 3: 81-116 mm SL, Oeno; BPBM 16674, 203 mm SL, Pitcairn; BPBM 16695, 2: 41-121 mm SL, Pitcairn; BPBM 16959, 39 mm SL, Pitcairn; BPBM 16967, 2: 42-78 mm SL, Pitcairn; BPBM 17024, 60 mm SL, Pitcairn; BPBM 17957, 5: 65-150 mm SL, Henderson; BPBM 38417, 35 mm SL, Oeno.

Thalassoma purpureum (Forsskål, 1775). BPBM 13235, 240 mm SL, Pitcairn; BPBM 16811, 196 mm SL, Pitcairn; BPBM 17056, 6: 32-112 mm SL, Henderson; BPBM 17106, 2: 259-272 mm SL, Henderson; BPBM 17138, 3: 115-277 mm SL, Ducie; BPBM 28929, 2: 83-100 mm SL, Pitcairn; observed at Oeno.

Thalassoma trilobatum (Lacepède, 1801). BPBM 17020, 2: 125-153 mm SL, Pitcairn; observed at Oeno and Henderson.

Wetmorella nigropinnata (Seale, 1901). BPBM 16544, 2: 53-58 mm SL, Oeno.

Xyrichtys pavo Valenciennes, 1839. BPBM 16832, 266 mm SL, Pitcairn; observed at Henderson (Irving et al, 1995).

SCARIDAE (PARROTFISHES)

Calotomus carolinus (Valenciennes, 1839). BPBM 16658, 398 mm SL (head and caudal fin saved), Pitcairn.

Chlorurus frontalis (Valenciennes, 1840). BPBM 16596, 342 mm SL, Oeno; BPBM 16632, 508 mm SL (saved head), Pitcairn; BPBM 16808, 6: 22-142 mm SL, Pitcairn; BPBM 16837, 595 mm SL (saved head), Pitcairn.

Chlorurus microrhinos (Bleeker, 1854). BPBM 16598, 460 mm SL (saved head), Oeno; BPBM 16825, 404 mm SL (saved head and caudal fin), Pitcairn; BPBM 17115, 312 mm SL, Ducie; BPBM 17116, 325 mm SL, Ducie; observed at Henderson.

Chlorurus sordidus (Forsskål, 1775). BPBM 17134, 214 mm SL, Ducie; BPBM 38416, 79 mm SL, Oeno.

Leptoscarus vaigiensis (Quoy and Gaimard, 1824). BPBM 16815, 258 mm SL, Pitcairn.

Scarus altipinnis (Steindachner, 1879). BPBM 16836, 2: 426-527 mm SL (saved heads and caudal fins), Pitcairn.

Scarus forsteni (Bleeker, 1861). BPBM 16597, 361 mm SL, Oeno; BPBM 16704, 335 mm SL, Pitcairn; BPBM 16839, 392 mm SL, Pitcairn; BPBM 17123, 325 mm SL, Ducie; BPBM 17152, 298 mm SL, Ducie; observed at Henderson.

Scarus frenatus Lacepède, 1802. BPBM 17156, 370 mm SL, Ducie; BPBM 17160, 222 mm SL, Ducie.

Scarus ghobban Forsskål, 1775. Observed at Ducie.

Scarus longipinnis Randall and Choat, 1980. BPBM 16648, 280 mm SL (paratype), Pitcairn; BPBM 16656, 209 mm SL (paratype), Pitcairn; BPBM 16680, 274 mm SL (holotype), Pitcairn; BPBM 16763, 170 mm SL (paratype), Pitcairn; BPBM 16773, 211 mm SL (paratype), Pitcairn; observed at Henderson.

PINGUIPEDIDAE (SAND PERCHES)

Parapercis millepunctata (Günther, 1860). BPBM 16454, 134 mm SL, Pitcairn; BPBM 17029, 73 mm SL, Pitcairn.

Parapercis multiplicata Randall, 1984. BPBM 16451, 63 mm SL, Pitcairn. (Fig. 30).

Parapercis schauinslandii (Steindachner, 1900). BPBM 16453, 71 mm SL, Pitcairn.

TRIPTERYGIIDAE (TRIPLEFINS)

Enneapterygius ornatus Fricke, 1997. BPBM 17081, 21.8 mm SL (holotype), Henderson; BPBM uncat., 16: 19.5-24.4 mm SL (paratypes), Henderson.

Enneapterygius pyramis Fricke, 1994. BPBM 16486, 20.7 mm SL, Oeno; BPBM 16537, 2: 13.8-15 mm SL, Oeno; BPBM 16916, 6: 21.2-24.6 mm SL, Pitcairn; BPBM 16923, 12: 11.4-26.2 mm SL, Pitcairn; BPBM 16948, 4: 17.4-21.7 mm SL, Pitcairn; BPBM 16957, 5: 13.7-25.9 mm SL, Pitcairn; BPBM 16972, 14: 11.8-21.8 mm SL, Pitcairn; BPBM 16985, 7: 15.2-23.9 mm SL, Pitcairn; BPBM 16998, 23 mm SL, Pitcairn; BPBM 17002, 6: 21.2-25.6 mm SL, Pitcairn; BPBM 17003, 3: 13.6-23 mm SL, Pitcairn; BPBM 17026, 3: 21.1-21.6 mm SL, Pitcairn; BPBM 17028, 2: 23.4-24.1 mm SL, Pitcairn. (Fig. 31).

Norfolkia thomasi Whitley, 1964. BPBM 16897, 34 mm SL, Pitcairn.

CREEDIIDAE (SAND BURROWERS)

Chalixodytes tauensis Schultz, 1943. BPBM 17025, 2: 35-38 mm SL, Pitcairn; BPBM 29655, 3: 35-38 mm SL, Pitcairn.

Crystalloodytes cookei enderburyensis Schultz, 1943. BPBM 12269, 2: 35-42 mm SL, Ducie; BPBM 16871, 41 mm SL, Pitcairn; BPBM 16979, 40 mm SL, Pitcairn; BPBM 16992, 11: 19-41 mm SL, Pitcairn; BPBM 17098, 11: 35-52 mm SL, Pitcairn.

Limnichthys donaldsoni Schultz, 1960. BPBM 16886, 2: 18-19 mm SL; BPBM 16958, 2: 24-27 mm SL, Pitcairn; BPBM 17086, 19 mm SL, Henderson.

AMMODYTIDAE (SAND LANCES)

Ammodytes sp. An undescribed species from Pitcairn under study by Bruce B. Collette and the author.

BLENNIIDAE (BLENNIES)

Alticus sp. BPBM 16438, 64 mm SL, Pitcairn; BPBM 16801, 6: 28-66 mm SL, Pitcairn; BPBM 16866, 3: 43-72 mm SL, Pitcairn; BPBM 17016, 28 mm SL,

- Pitcairn; BPBM 17097, 34: 22-61 mm SL, Henderson; BPBM 36430, 7: 36-51 mm SL, Henderson; MCZ 35569, 3: 39-55 mm, collected at Pitcairn by H. Schroeder, 14 December 1939; examined by the author at the Museum of Comparative Zoology, Harvard University. A new species that will be described in a revision of the genus by Jeffrey T. Williams.
- Blenniella gibbifrons* (Quoy and Gaimard, 1824). BPBM 16733, 4: 43-73 mm SL, Pitcairn; BPBM 17010, 10: 39-84 mm SL; BPBM 17095, 16: 32-69 mm SL, Henderson; BPBM 17147, 11: 39-64 mm SL, Ducie.
- Blenniella paula* (Bryan and Herre, 1903). BPBM 17128, 2: 52-60 mm SL, Ducie.
- Cirripectes alboapicalis* (Ogilby, 1899). BPBM 12267, 2: 21-38 mm SL, Ducie; BPBM 16482, 2: 38-42 mm SL, Oeno; BPBM 16730, 2: 70-82 mm SL, Pitcairn; BPBM 16974, 14: 35-58 mm SL, Pitcairn; BPBM 16996, 37 mm SL, Pitcairn; BPBM 17096, 15: 41-73 mm SL, Henderson; BPBM 30983, 30 mm, Henderson. (Fig. 32).
- Cirripectes quagga* (Fowler and Ball, 1924). BPBM 17070, 10: 29-46 mm SL, Henderson. (Fig. 33).
- Cirripectes variolosus* (Valenciennes, 1836). BPBM 12270, 4: 28-61 mm SL, Ducie; BPBM 16928, 2: 42-43 mm SL, Pitcairn; BPBM 16941, 2: 25-53 mm SL, Pitcairn; BPBM 17009, 40 mm SL, Pitcairn; BPBM 17079, 4: 25-29 mm, Henderson; BPBM 31010, 5: 39-47 mm SL, Pitcairn.
- Entomacrodus caudofasciatus* (Regan, 1909). BPBM 13749, 2: 32-36 mm SL, Ducie; BPBM 13753, 9: 40.5-55 mm SL, Pitcairn; BPBM 17094, 6: 29-55 mm SL, Henderson.
- Entomacrodus niuafoouensis* (Fowler, 1932). BPBM 13745, 2: 65-80 mm SL, Henderson; BPBM 13756, 7: 32-97 mm SL, Pitcairn; BPBM 13757, 13: 18-21 mm SL, Pitcairn. (Fig. 34).
- Entomacrodus rofeni* Springer, 1967. BPBM 13746, 48 mm SL, Henderson; BPBM 13750, 5: 49-52 mm SL, Ducie; BPBM 13751, 4: 46-49 mm SL, Ducie; BPBM 17092, 20: 34-53 mm SL, Henderson. (Fig. 35).
- Entomacrodus sealei* Bryan and Herre, 1903. BPBM 13754, 10: 41.6-61.2 mm SL, Pitcairn; BPBM 17091, 10: 19-96 mm SL, Henderson.
- Entomacrodus striatus* (Valenciennes, 1836). BPBM 13748, 44 mm SL, Ducie; BPBM 16437, 63 mm SL, Pitcairn; BPBM 17018, 69: 28-104 mm SL, Pitcairn; BPBM 36431, 52 mm SL, Henderson.
- Exallias brevis* (Kner, 1968). BPBM 17062, 92 mm SL, Henderson.
- Istiblennius edentulus* (Bloch and Schneider, 1801). BPBM 17021, 3: 109-136 mm SL, Pitcairn.

Plagiotremus tapeinosoma (Bleeker, 1857). BPBM 16672, 45 mm SL, Pitcairn; BPBM 16514, 88 mm SL, Oeno; BPBM 17104, 44 mm SL, Henderson.

Praealticus caesius (Seale, 1906). BPBM 16729, 23: 18-67 mm SL, Pitcairn; BPBM 16800, 6: 43-59 mm SL, Pitcairn. (Fig. 36).

Rhabdoblennius ellipes (Jordan and Starks, 1906). BPBM 13752, 11: 26-39 mm SL, Ducie; BPBM 16734, 3: 31-33 mm SL, Pitcairn; BPBM 16903, 3: 30-39 mm SL, Pitcairn; BPBM 17080, 17: 26-41 mm SL, Henderson. Identified as *R. rhabdotrachelus* (Fowler and Ball) by Irving et al. (1995), but this appears to be a junior synonym of *R. ellipes*. (Fig. 37).

Stanulus seychellensis Smith, 1959. BPBM 13747, 29 mm SL, Henderson.

GOBIESOCIDAE (CLINGFISHES)

Lepadichthys frenatus Waite, 1904. BPBM 16921, 5: 13-39 mm SL, Pitcairn; BPBM 38419, 8: 19-35 mm SL, Oeno.

Pheralloodus indicus (Weber, 1913). BPBM 17071, 10.5 mm SL, Henderson. Identified by John C. Briggs.

CALLIONYMIDAE (DRAGONETS)

Synchiropus ocellatus (Pallas, 1770). BPBM 16473, 42 mm SL, Oeno; BPBM 16946, 24 mm SL, Pitcairn.

GOBIIDAE (GOBIES)

Bathygobius cocosensis (Bleeker, 1854). BPBM 16874, 41 mm SL, Pitcairn.

Bathygobius cotticeps (Steindachner, 1880). BPBM 17008, 35 mm SL, Pitcairn.

Eviota albolineata Jewett and Lachner, 1983. BPBM 17142, 17.5 mm SL, Ducie.

Eviota saipanensis Fowler, 1945. BPBM 17076, 18 mm SL, Henderson.

Gnatholepis cauerensis (Bleeker, 1853). BPBM 16532, 7: 25-49 mm SL, Oeno; BPBM 16538, 10: 22-50 mm SL, Oeno; BPBM 16846, 2: 41-44 mm SL, Pitcairn; BPBM 16880, 33 mm SL, Pitcairn; BPBM 38423, 2: 20-22 mm SL, Oeno. These specimens, along with ones from Rapa, Austral Islands, and Rarotonga are being described as a new subspecies by Randall and Greenfield (MS).

Gobiodon sp. BPBM 17090, 3: 19-27 mm SL, Henderson. These specimens are characterised by uniform brown colour in alcohol (finely speckled with dark brown under magnification), dorsal rays VI-I,9; last membrane of spinous dorsal fin linked to first spine of second dorsal fin about one-fifth spine length above its base; anal rays I,8; pectoral rays 18; gill rakers 2 + 7; a broad groove between interopercle and isthmus; gill opening equals full height of pectoral-fin base. *Gobiodon* sp. of BPBM 17227, 17 mm SL, reported by Randall et al.

(1990) appears to be the same species. A revision of this genus is needed.

Heteroteotris sp. BPBM 38424 and 38425 from Oeno on loan to Douglass F. Hoese since 1983.

Paragobiodon sp. BPBM 16498, 3: 15-21 mm SL, Oeno; BPBM 16526, 3: 21-28 mm SL, Oeno; BPBM 16913, 2: 26-27 mm SL, Pitcairn. These specimens have numerous large fleshy papillae on the cheek and ventrally on the head, small slender papillae dorsally on the head and nape, rows of papillae along the membranes of the ventral surface of the pelvic disc, no scales ventrally on abdomen, and 23 pectoral rays; they are brown in preservative, the head paler than body, and the median fins darker. BPBM 13545, 2: 22-23 mm SL, from Mangareva may be the same species. *Paragobiodon* is also in need of revision.

Priolepis squamogena Winterbottom and Burrige, 1989. BPBM 12249, 5: 29-38 mm SL, Ducie; BPBM 16911, 27 mm SL, Pitcairn; BPBM 16981, 30 mm SL, Pitcairn; BPBM 16989, 3: 32-41 mm SL, Pitcairn. Reported from Ducie by Rehder and Randall (1975: 24) as *Quisquilius cinctus* (Regan).

Priolepis semidoliatus (Valenciennes, 1830). BPBM 12260, 6: 12-22 mm SL, Ducie; BPBM 16994, 6: 17-19 mm SL, Pitcairn; BPBM 17141, 13 mm, Ducie.

Trimmatom sp. BPBM 16915, 11 mm SL, Pitcairn; BPBM 16935, 2: 11-16 mm SL, Pitcairn; BPBM 17012, 17 mm SL, Pitcairn; BPBM 17072, 13 mm SL, Henderson; BPBM 17143, 11 mm SL, Ducie; BPBM 38433, 2: 9-14 mm SL, Oeno. An undescribed species of the *eviotops* complex under study by Richard Winterbottom.

MICRODESMIDAE (DARTFISHES AND WORMFISHES)

Nemateleotris magnifica Fowler, 1938. BPBM 16612, 5: 61-64 mm SL, Oeno; BPBM 16908, 48 mm SL, Pitcairn; observed at Henderson (Irving et al., 1995)

Ptereleotris evides (Jordan and Hubbs, 1925). Observed at Oeno.

ACANTHURIDAE (SURGEONFISHES)

Acanthurus achilles (Shaw, 1803). BPBM 17158, 170 mm SL, Ducie; underwater photo taken at Henderson.

Acanthurus guttatus Bloch and Schneider, 1801. BPBM 13239, 150 mm SL, Pitcairn; BPBM 17101, 190 mm SL, Henderson.

Acanthurus leucopareius (Jenkins, 1903). BPBM 12251, 4: 63-78 mm SL, Ducie; BPBM 16583, 2: 141-172 mm SL, Oeno; BPBM 16688, 61 mm SL, Pitcairn; BPBM 16720, 3: 85-124 mm SL, Pitcairn; BPBM 17066, 3: 72-109

mm SL, Henderson.

- Acanthurus nigrofuscus* (Forsskål, 1775). BPBM 13244, 130 mm SL, Pitcairn; BPBM 17064, 84 mm SL, Henderson.
- Acanthurus nigroris* Valenciennes, 1835. BPBM 12279, 149 mm SL, Henderson.
- Acanthurus nubilus* (Fowler and Bean, 1929). BPBM 16710, 189 mm SL, Pitcairn; BPBM 17155, 200 mm SL, Ducie; observed at Henderson. (Fig. 38).
- Acanthurus thompsoni* (Fowler, 1923). BPBM 16582, 2: 164-167 mm SL, Oeno; BPBM 16771, 114 mm SL, Pitcairn; observed at Ducie and Henderson.
- Acanthurus triostegus* (Linnaeus, 1758). BPBM 12239, 149 mm SL, Ducie; BPBM 16569, 2: 64-141 mm SL, Oeno; BPBM 16668, 152 mm SL, Pitcairn; BPBM 16731, 6: 70-86 mm SL, Pitcairn; observed at Henderson (Irving et al., 1995).
- Ctenochaetus hawaiiensis* Randall, 1955. BPBM 16681, 214 mm SL, Pitcairn; BPBM 17164, 220 mm SL, Ducie; observed at Henderson.
- Ctenochaetus striatus* (Quoy and Gaimard, 1825). BPBM 16584, 9: 59-159 mm SL, Oeno; BPBM 16751, 210 mm SL, Pitcairn; observed at Henderson (Irving et al., 1995).
- Ctenochaetus strigosus* (Bennett, 1828). BPBM 13249, 112 mm SL, Pitcairn; BPBM 16570, 4: 99-126 mm SL, Oeno; BPBM 17135, 72 mm SL, Ducie; observed at Henderson.
- Naso brevirostris* (Valenciennes, 1835). Observed at Ducie and Henderson.
- Naso caesius* Randall and Bell, 1992. BPBM 16813, 407 mm SL (saved head and caudal fin), Pitcairn; observed at Henderson.
- Naso hexacanthus* (Bleeker, 1855). Observed at Pitcairn, Ducie, and Henderson.
- Naso lituratus* (Forster in Bloch and Schneider, 1801). BPBM 16616, 292 mm SL (saved head), Oeno; BPBM 16780, 269 mm SL, Pitcairn.
- Naso unicornis* (Forsskål, 1775). BPBM 16595, 303 mm SL, Oeno; BPBM 16776, 536 mm SL (saved head and caudal fin with spines), Pitcairn; observed at Henderson (Irving et al., 1995).
- Zebrasoma rostratum* (Günther, 1873). BPBM 16711, 164 mm SL, Pitcairn; BPBM 17136, 182 mm SL, Ducie.
- Zebrasoma scopas* (Cuvier, 1829). BPBM 16709, 175 mm SL, Pitcairn; observed at Henderson.
- Zebrasoma veliferum* (Bloch, 1797). BPBM 16827, 190 mm SL, Pitcairn; observed at Henderson (Irving et al., 1995).

ZANCLIDAE (MOORISH IDOL FAMILY)

Zanclus cornutus (Linnaeus, 1758). BPBM 17136, 147 mm SL, Oeno; observed at the other three islands.

SIGANIDAE (RABBITFISHES)

Siganus argenteus (Quoy and Gaimard, 1825). BPBM 17931, 310 mm SL, Pitcairn.

TRICHTURIDAE (CUTLASSFISHES)

Benthodesmis sp. BPBM 36423, 113 mm SL, Henderson; regurgitated by a juvenile masked booby.

SPHYRAENIDAE (BARRACUDAS)

Sphyræna helleri Jenkins, 1901. BPBM 16600, 603 mm SL, Oeno; BPBM 16760, 540 mm (saved head and caudal fin), Pitcairn; BPBM 36427, 540 mm SL, Henderson (reported as *S. novaehollandae* by Irving et al., 1995).

GEMPYLIDAE (SNAKE MACKERELS)

Gempylus sp. AMNH 8261, 193 mm SL, Ducie, from a white tern. Reported by Nichols (1923) as *Lemnisoma thyrstitoides* Lesson. The specimen was borrowed from the American Museum of Natural History by the author and reidentified only to genus (noted as having 31 dorsal spines).

SCOMBRIDAE (TUNAS AND MACKERELS)

Acanthocybium solandri (Cuvier, 1831). BPBM 16829, 1290 mm SL (saved head), Pitcairn.

Katsuwonus pelamis (Linnaeus, 1758). On 2-5 February 1980 a tuna survey of the South Pacific Commission in Pitcairn waters resulted in the capture of 11 skipjack tuna.

Gymnosarda unicolor (Rüppell, 1836). BPBM 16966, 1080 mm FL (saved head), Oeno; observed at Pitcairn and Henderson.

Thunnus albacares (Bonnaterre, 1788). BPBM 16779, 1445 mm FL (saved head and fins), Pitcairn.

Thunnus obesus (Lowe, 1839). The above-mentioned tuna survey of 1980 resulted in 321 yellowfin tuna and two bigeye tunas.

BOTHIDAE (LEFT EYE FLOUNDERS)

Bothus mancus (Broussonet, 1782). BPBM 16571, 205 mm SL, Oeno; BPBM 16662, 142 mm SL, Pitcairn; BPBM 17013, 2: 74-75 mm SL, Ducie; BPBM 17149, 184 mm SL, Ducie; BPBM 36428, 225 mm SL, Henderson.

SAMARIDAE (SLENDER FLOUNDERS)

Samariscus triocellatus Woods in Schultz, 1953. BPBM 16608, 40 mm SL, Oeno.

BALISTIDAE (TRIGGERFISHES)

Balistoides viridescens (Bloch and Schneider, 1801). Observed at Pitcairn and Henderson.

Pseudobalistes fuscus (Bloch and Schneider, 1801). BPBM 16599, 374 mm SL, Oeno; observed at Pitcairn and Ducie.

Rhinecanthus aculeatus (Linnaeus, 1758). BPBM 16565, 160 mm SL, Oeno; observed at Henderson (Irving et al., 1995).

Rhinecanthus lunula Randall and Steene, 1983. BPBM 17177, 218 mm SL (paratype), Ducie; observed at Pitcairn and Henderson.

Rhinecanthus rectangulus (Bloch and Schneider, 1801). BPBM 12241, 123 mm SL, Ducie; BPBM 12280, 174 mm SL, Henderson; BPBM 16667, 152 mm SL, Pitcairn; observed at Oeno.

Sufflamen bursa (Bloch and Schneider, 1801). BPBM 13255, 180 mm SL, Pitcairn; BPBM 16557, 122 mm SL, Oeno; BPBM 16769, 162 mm SL, Pitcairn; BPBM 17157, 158 mm SL, Ducie; observed at Henderson.

Sufflamen fraenatus (Latreille, 1804). BPBM 16575, 221 mm SL, Oeno; observed at Henderson.

Xanthichthys mento (Jordan and Gilbert, 1882). BPBM 13256, 2: 130-158 mm SL, Pitcairn; BPBM 16822, 5: 130-155 mm SL, Pitcairn; BPBM 16834, 4: 142-162 mm SL, Pitcairn.

MONACANTHIDAE (FILEFISHES)

Aluterus scriptus (Osbeck, 1765). Observed at Pitcairn and Henderson.

Cantherhines dumerilii (Hollard, 1854). BPBM 16669, 210 mm SL, Pitcairn; BPBM 17167, 273 mm SL, Ducie; observed at Henderson.

Cantherines pardalis (Rüppell, 1837). BPBM 12246, 130 mm SL, Ducie; BPBM 16675, 155 mm SL, Pitcairn; observed at Henderson.

OSTRACIIDAE (TRUNKFISHES)

Ostracion meleagris Shaw, 1796. Observed at Henderson (Irving et al., 1995).

TETRAODONTIDAE (PUFFERS)

Arothron meleagris (Lacepède, 1798). BPBM 16564, 170 mm SL, Oeno; BPBM 16748, 195 mm SL, Pitcairn; BPBM 17121, 233 mm SL, Ducie; observed at Henderson.

Canthigaster janthinoptera (Bleeker, 1855). BPBM 11171, 3: 42.5-54 mm SL, Oeno; BPBM 11182, 37 mm SL, Oeno; BPBM 11187, 6: 38.5-51 mm SL, Oeno; BPBM 11209, 20 mm, Pitcairn.

DIODONTIDAE (PORCUPINEFISHES)

Diodon holocanthus Linnaeus, 1758. BPBM 13251, 148 mm SL, Pitcairn; BPBM 16445, 123 mm SL, Pitcairn; BPBM 16459, 2: 144-168 mm SL, Oeno; observed at Henderson (Irving et al., 1995).

Diodon hystrix Linnaeus, 1758. BPBM 16631, 275 mm SL, Pitcairn; BPBM

16717, 2: 294-380 mm SL, Pitcairn; BPBM 16821, 278 mm SL, Pitcairn; one of 380 mm SL collected at Ducie but not saved; observed at Oeno.

MOLIDAE (MOLAS)

Ranzania laevis (Pennant, 1776). BPBM 36425, 96 mm SL and BPBM 36426, 113 mm SL. Both dropped on land at Henderson by fairy terns.

DISCUSSION

The most common fishes observed at diving depths of about 10-20 m at Pitcairn were the wrasses *Thalassoma lutescens* and *Coris* sp., the surgeonfish *Acanthurus leucopareius*, the damselfishes *Chrysiptera galba* and *Stegastes fasciolatus*, and the sea chub *Kyphosus bigibbus*. The last-mentioned was not uniformly distributed but occurred in large aggregations, usually near a rocky area with ledges and caves. This fish is the most important food fish for the islanders who catch it in large numbers with hook and line. An occasional individual is entirely bright yellow; rarely one may see an all-white one. There are also fish of mixed yellow and brown, white and brown, and most rarely, white and yellow. Aggregations of *Chromis bami* and *C. pamae* were locally abundant.

In the shallower water the wrasse *Pseudolabrus fuentesi* was most common where the bottom was thickly covered with brown algae, and *Thalassoma heiseri* on hard substratum where there was little algal cover.

In their respective families, the most common species as viewed by divers were *Chaetodon smithi* of the butterflyfishes, *Epinephelus fasciatus* of the groupers, *Scarus longipinnis* of the parrotfishes, and *Myripristis berndti* of the squirrelfishes and soldierfishes.

Jacks were not common at Pitcairn compared to the other three uninhabited islands, probably because of fishing pressure. Those species most often seen were *Caranx lugubris*, *Pseudocaranx dentex*, and *Carangoides orthogrammus*.

The most common fishes observed at Ducie Atoll were *Kyphosus bigibbus*, *Thalassoma lutescens*, *T. heiseri*, *Chlorurus microrhinos*, *Acanthurus leucopareius*, *Chrysiptera galba*, *Stegastes emeryi*, and *Caranx lugubris*. One can count 16 solitary individuals of *C. lugubris* in the underwater photograph of Fig. 28 in Rehder and Randall (1975). This brazen fish often approached the divers closely; one struck the author with its tail as it swam past, and some were fed by hand with pieces of octopus. *Chaetodon ulietensis* was the most common of the butterflyfishes (Figs. 24 and 25 in Rehder and Randall, 1975), *Epinephelus fasciatus* and *E. tauvina* the most common of the groupers, and *Parupeneus bifasciatus* and *P. cyclostomus* the most common of the goatfishes. No

individuals of the two unicornfishes *Naso lituratus* and *N. unicornis* were seen at Ducie; this might be related to the paucity of brown algae at the atoll.

The fish fauna of the Pitcairn Islands is impoverished compared to that of the archipelagos to the west. The total number of fishes listed in the present report is 348, of which 13 are pelagic species. Randall (1985) listed 593 species of shore fishes for the Society Islands alone. The reason for the relatively few Pitcairn species of fishes is undoubtedly related to the isolation of the islands, their more southern location, their small size, and the lack of some habitats such as estuaries, mangroves, and seagrass beds. Still, the Pitcairn fish fauna is far larger than that of the very remote Easter Island, with 126 shore species.

As would be expected, the fish fauna of the Pitcairn Islands is very similar to that of the southeastern islands of the Tuamotu Archipelago; however, there are some species that were seen at the Gambier Group of the Tuamotus (our field work at Mangareva and Temoe Atoll) but not sighted in the Pitcairn Islands. Tuamotu fishes that are apparently absent from the Pitcairn Islands include: *Gymnothorax pictus*, *Epinephelus polyphekadion*, *Pseudanthias pascalus*, *Lutjanus fulvus*, *Parupeneus barberinus*, *Hoplostiltilus starcki*, *Ellochelon vaigiensis*, *Plectroglyphidodon lacrymatus*, *Pomacentrus coelestis*, *Bodianus perditio*, *Epibulus insidiator*, *Cetoscarus bicolor*, *Hipposcarus longiceps*, *Sphyræna qenie*, *Ostracion cubicus*, *Canthigaster solandri*, and *C. valentini*.

Of the 335 shore fishes of the Pitcairn Islands, 284 are tropical Indo-Pacific species or ones that are wide-ranging in the central and western Pacific.

Five species of fishes are presently known only from the Pitcairn Islands: *Sargocentron megalops*, *Hemitaurichthys multispinosus*, *Ammodytes* sp., *Enneapterygius ornatus*, and *Alticus* sp.

The following 21 species of Pitcairn fishes occur only in the South Pacific below a latitude of 20°S: *Gymnothorax australicola*, *G. nasuta*, *Myripristis tiki*, *Sargocentron hormion*, *Cosmocampus howensis*, *Pseudogramma australis*, *Amblycirrhitus wilhelmi*, *Chaetodon flavirostris*, *Chaetodon smithi*, *Centropyge hotumatua*, *Genicanthus spinus*, *Chromis bami*, *C. pamae*, *Chrysiptera galba*, *Anampses femininus*, *Pseudocheilinus citrinus*, *Pseudolabrus fuentesi*, *Scarus longipinnis*, *Cirripectes alboapicalis*, *Praealticus caesius*, and *Gobiodon* sp. Some of these are wide-ranging across much of the South Pacific. *Gymnothorax australicola*, *Cosmocampus howensis*, and *Anampses femininus* occur from Easter Island to Lord Howe Island or New South Wales.

Sixteen other Pitcairn fishes are confined to the Southern Hemisphere at latitudes greater than 14° S: *Myripristis randalli*, *Scorpaenopsis* sp., *Epinephelus tuamotuensis*, *Pseudanthias mooreanus*, *Paracirrhites nisus*, *Cercamia cladara*, *Pomachromis fuscidorsalis*, *Stegastes emeryi*, *Cirrhilabrus scottorum*, *Coris* sp.,

Oxycheilinus sp., *Thalassoma heiseri*, *Entomacrodus rofeni*, *Paragobiodon* sp., *Trimmatom* sp., and *Rhinecanthus lunula*. All but the last-mentioned are restricted to the Pitcairn Islands and the islands of French Polynesia except the Marquesas.

Twelve species of Pitcairn fishes are antitropical or antiequatorial in distribution based on present knowledge: *Gymnothorax eurostus*, *Saurida flamma*, *Synodus capricornis*, *Iracundus signifer*, *Sebastapistes tinkhami*, *Pseudocaranx dentex*, *Seriola lalandi*, *Pseudojuloides atavai*, *Lepadichthys frenatus*, *Norfolkia thomasi*, *Acanthurus leucopareius*, and *Xanthichthys mento*.

ACKNOWLEDGEMENTS

The expedition on "Westward" was supported principally by a grant from the National Geographic Society to the Bishop Museum. The vessel was made available by the Oceanic Foundation in Hawaii, as well as half her operating costs. The Hawaii Institute of Marine Biology of the University of Hawaii loaned a small boat and diving gear.

Assistance in the collection of fishes was provided by J. David Bryant, Dean B. Cannoy, R. Richard Costello, Dr. Guy Haywood, his son the late James R. Haywood, Denis N. Hewett, the late Rhett M. McNair, Akihiko Sinoto, and several of the Pitcairn Islanders, in particular Stephen Christian and Noggie Young. Robert A. Irving donated Henderson Island fish specimens to the Bishop Museum.

Special thanks are due the friendly people of Pitcairn for their gracious hospitality and help in innumerable ways.

I am grateful to Eugenia B. Böhlke, John C. Briggs, William N. Eschmeyer, Thomas H. Fraser, David W. Greenfield, Walter Ivantsoff, John E. McCosker, Randall D. Mooi, David G. Smith, Victor G. Springer, Kenneth A. Tighe, Jeffrey T. Williams, and Richard Winterbottom for their aid in the identification of Pitcairn fishes. Also thanks to Roy T. Tsuda who identified marine algae from Pitcairn, and Lars-Ake Gothesson for some records of Pitcairn fishes after the 1970-71 visit on "Westward". The manuscript was reviewed by Robert F. Myers.

LITERATURE CITED

- ALLEN, G.R. & J.E. RANDALL. 1974. -- Five new species and a new genus of damselfishes (Family Pomacentridae) from the South Pacific Ocean. *Tropical Fish Hobbyist* 21 (9): 36-46, 48-49.

- CASTLE, P.H.J. 1968. -- A contribution to a revision of the moringuid eels. *Special Publication of the Department of Ichthyology, Rhodes University, Grahamstown* 3: 1-29.
- CRESSEY R. & J.E. RANDALL. 1978. -- *Synodus capricornis*, a new lizardfish from Easter and Pitcairn Islands. *Proceedings of the Biological Society of Washington* 91 (3): 767-774.
- DISALVO, L.H., J.E. RANDALL, & A. CEA. -- 1988. Ecological reconnaissance of the Easter Island sublittoral environment. *National Geographic Research* 4 (4): 451-473.
- FRICKE, R. 1997. -- *Tripterygiid Fishes of the Western and Central Pacific (Teleostei)*. Koeltz Scientific Books, Koenigstein, Germany, ix + 607 pp.
- GREENFIELD, D.W. 1974. -- A revision of the squirrelfish genus *Myripristis* Cuvier (Pisces: Holocentridae). *Natural History Museum Los Angeles County Science Bulletin* 19: 1-54.
- GOSLINE, W.A. & D.W. STRASBURG. 1956. -- The Hawaiian fishes of the family Moringuidae: another eel problem. *Copeia* 1956 (1): 9-18.
- HERALD, E.W. & J.E. RANDALL. 1972. -- Five new Indo-Pacific pipefishes. *Proceedings of the California Academy of Sciences* 39 (11): 121-140.
- IRVING, R.A., J. JAMIESON & J.E. RANDALL. 1995. -- Initial checklist of fishes from Henderson Island, Pitcairn Group. *Biological Journal of the Linnean Society* 56: 329-338.
- LAVENBERG, R.J. 1992. -- A new moray eel (Muraenidae: *Gymnothorax*) from oceanic islands of the South Pacific. *Pacific Science* 46 (1): 58-67.
- MCCOSKER, J.E. & J.E. RANDALL. 1977. -- Three new species of Indo-Pacific moray eels (Pisces: Muraenidae). *Proceedings of the California Academy of Sciences* 41 (3): 161-168.
- NICHOLS, J.T. 1923. -- Two new fishes from the Pacific Ocean. *American Museum Novitates* 94: 1-3.
- PAULAY, G. 1989. -- Marine invertebrates of the Pitcairn Islands: species composition and biogeography of corals, molluscs, and echinoderms. *Atoll Res. Bull.* 326: 1-28.
- RANDALL, H.A. & G.R. ALLEN. 1977. -- A revision of the damselfish genus *Dascyllus* (Pomacentridae) with description of a new species. *Records of the Australian Museum* 31 (9): 349-385.
- RANDALL, J.E. 1972. -- A revision of the labrid fish genus *Anampses*. *Micronesica* 8 (1 & 2): 151-190.
- RANDALL, J.E. 1973. -- Expedition to Pitcairn. *Oceans* 6: 12-21.
- RANDALL, J.E. 1975a. -- Three new butterflyfishes (Chaetodontidae) from southeast Oceania. *UO* 25: 12-22.